

PROCEEDINGS

of the thirteenth

Conference on Mennonite Educational and Cultural Problems



Held at

Tabor College, Hillsboro, Kansas

June 8, 9, 1961

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Published

Under the Auspices of the Council of
Mennonite and Affiliated Colleges

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FOREWORD

The Thirteenth Conference on Mennonite Educational and Cultural Problems held at Tabor College, Hillsboro, Kansas, marks a new high in the realm of serious inter-Mennonite intellectual discussions. The first and second addresses discussed concrete collegiate administrative problems. The first dealt with the question of student attrition at Bethel College. It is a question of national concern among small colleges. The second discussion centered around the subject of Mennonite students in non-Mennonite schools. The papers focused attention on why so high a percentage of college students drop out of school before completing their courses of study and why students wanting a college education never attend their own denomination's school. The papers were buttressed by tables and charts which provided statistical evidence in support of the hypotheses advanced.

The four cultural conference sessions dealt with the more abstract and theoretical question of the relation of scientific research to aspects of the Mennonite faith. A characteristic of this conference was the frankness with which profound intellectual problems pertaining to a religio-cultural group were probed. The intensity of the investigators and the openmindedness of the audience who participated in the discussion of the questions was an exhilarating experience. The presentations will force thinking Mennonites to face squarely some of the intellectual problems that their religious professions, their theology and the scientific minded age in which we live force upon us.

The Conference over the almost twenty years of its existence has provided a forum for discussion of a wide variety of subjects pertaining to Mennonite faith, life, and culture. It is the only opportunity for such discussion among Mennonite college people. In the future this conference might well be used for an extension of these discussions and an enrichment of intellectual stimulation.

J. W. Fretz
Conference Secretary

October 14, 1961

Tribute to J. Winfield Fretz

This issue of the *Proceedings of the 12th Conference on Mennonite Educational and Cultural Problems* is gratefully dedicated to Dr. J. Winfield Fretz who has served this Conference as its executive secretary since it was organized in Chicago on December 31, 1941. Dr. Fretz was one of the men who originally conceived the vision for such a Conference; he invested much time and energy to make this vision a successful reality. In spite of his many professional and church duties, Dr. Fretz has given his time unstintingly to promote the interests of the Conference. Before the annual (now, bi-annual) meetings he was planning, organizing, and encouraging research; after the sessions he patiently collected and edited for publication in the printed proceedings the various papers that had been presented. The growth and the maturation which the Cultural Conference has experienced can in a large measure be attributed to the untiring and selfless service of Dr. Fretz.

—Prof. Jacob A. Loewen
Pres., Mennonite Educational
and Cultural Conference.

December 31, 1961

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STUDENT ATTRITION IN COLLEGE AND WHY

By Peter E. Schellenberg

One of the more obvious features of a college operation is the wholesale student turnover in the program. Students come and go. They remain one, two, or more quarters, not long enough, however, to complete the twelve-quarter college program, and then disappear from the college campus.

This situation may reflect the effectiveness of a particular college. Young people come to college to satisfy needs and then return to where they came from or else settle in more desirable places.¹ When a student comes to college to try himself in academic pursuits, to make friends, to satisfy his curiosity regarding what college is about, or to add a bit of prestige to his holdings, this shortened college experience may serve well. Or, saying it in words by Stucky and Anderson in the Kansas study on *Persistence in College Attendance*, "Many young men and women realize their purpose in enrolling and attending college in varying periods of time less than the four years usually required for a degree. Many succeed during a relatively short stay in college in making the necessary contacts which enable them to leave with satisfaction. They get what they came for."²

If, however, a college program is looked upon as a four-year program of study which yields the desired results only after four years, far too many students are shortchanged. The community, and the constituency likewise are shortchanged. In the word of Iffert in his study *Retention and Withdrawal of College Students*, "College dropouts represent an alarming waste of our most competent manpower."²

What is the extent of student losses in a college? Where are the critical dropout periods? For what reasons do dropouts occur? What happens to students who drop out? These questions constitute the concern in the present study.

Five entering freshman classes at Bethel College, a group of

¹Stucky, Milo O., and Anderson, Kenneth E., *A Study of Persistence in College Attendance in Relation to Placement-Test Scores and Grade-Point Averages*. Kansas Studies in Education, Vol. 9, No. 2, April 1959. University of Kansas Publications, School of Education, Lawrence, Kansas. 58 pp.

²Iffert, Robert E., *Retention and Withdrawal of College Students*. Bulletin 1958, No. 1, U. S. Department of Health, Education, and Welfare. United States Government Printing Office, Washington, 1957. p. 99.

728 students, were studied. These classes were made up of the students entering college the first time in the fall quarters of the school years 1952-53, 1953-54, 1954-55, 1955-56, 1956-57. These groups would with normal progress toward graduation be the Graduating Classes of 1956, 1957, 1958, 1959, and 1960 respectively.

Information regarding a student's presence or absence in college from quarter to quarter was obtained from the records in the Office of the Registrar. A student withdrawing at any time after entering is considered a dropout. The student who drops out and later returns to college is still counted a dropout. He is, however, at the same time listed as a reentry. The data in this part of the study thus consist of the roll call from quarter to quarter over a period of from four to seven years of all students who entered as freshmen in the five classes studied.

The reasons for withdrawal and the withdrawing student's evaluation of the college experience were obtained with the use of an adaptation of a questionnaire prepared and used by John F. Courter.³

Student attrition as reflected in comparisons of the sizes of classes at the time of entering college as freshmen and at the end of the normal four consecutive years of college, the time of graduation from college, is presented in Table 1 for the five classes and the combined group.

TABLE 1

Comparison of the Sizes of College Classes at the Time of Entrance and the Time of Graduation at Bethel College

Year	Class Size — Classes					Combined
	1956	1957	1958	1959	1960	
Freshman Year	136	161	146	122	163	728
Graduating Class	86	80	105	92	100	463
Loss—Number	50	81	41	30	63	265
Loss—Percent	37	50	28	25	39	36

In terms of the above measure, losses of students to the school range from 25 percent to 50 percent of the entering classes in the course of four years and a loss of 36 percent for the entire group.

The procedure used here has the disadvantages of the cross-sectional approach to studies of this type. The composition of the groups compared differs from one time to the next. Student losses are reduced by the power of the school to attract replacements when withdrawals occur.

³Courter, John F., *A Study of Student Mortality in Six Liberal Arts Colleges in Kansas*. Unpublished Master's Thesis, Syracuse University, 1957. vii + 139 pp.

In Table 2 the manner of longitudinal studies, in which the same individuals are followed from year to year, has been used. It reports the losses in terms of the number and percent of students who entered as freshmen withdrawing from quarter to quarter over a period of four years.

TABLE 2

Student Withdrawal in College Classes during the Four Consecutive Years Following College Entrance.

Year—Quarter		Withdrawals — Classes											
		1956		1957		1958		1959		1960		Combined	
		(N 136)		(N 161)		(N 146)		(N 122)		(N 163)		(N 728)	
		N	%	N	%	N	%	N	%	N	%	N	%
First Year—	Fall	30	00	00	00	00	00	00	00	00	00	00	00
	Winter	09	07	22	14	05	03	07	06	05	03	48	07
	Spring	35	26	39	24	29	20	28	23	34	21	165	23
Second Year—	Fall	61	45	91	57	73	50	53	43	77	47	355	49
	Winter	63	46	102	63	78	53	53	43	79	48	375	52
	Spring	70	51	132	63	88	60	62	51	88	54	410	56
Third Year—	Fall	103	76	127	79	116	79	87	71	132	81	565	78
	Winter	104	76	129	80	121	83	88	72	132	81	574	79
	Spring	106	78	130	81	121	83	90	74	132	81	579	80
Fourth Year—	Fall	108	79	141	88	124	85	91	75	138	85	602	83
	Winter	109	80	141	88	124	85	93	76	138	85	605	83
	Spring	109	80	141	88	124	85	93	76	138	85	605	83

A class, beginning college with 100 percent of its members reporting, loses from 76 percent to 88 percent of its members during the four years immediately following entrance. In the combined group 83 percent of the 728 entering students are lost. In these calculations the student who withdraws at any time during the four years is considered a dropout even though he reenters later.

Student losses appear at the end of the first quarter and continue from quarter to quarter. These losses by quarters range from zero up to 33 percent of the entering group. The percentage losses at the end of each quarter in the classes and in the combined group are given in Table 3.

The greatest losses in these groups occur after the spring quarter of the first year at which time 190 of the 728 entering students in the combined group of 26 percent have left or leave. The end of the second year shows the second largest loss, a loss of 155 students or 22 percent of the students who started college. The third largest loss occurs at the end of the second quarter of the first year. This is a loss of 117 students or 16 percent of the group. Here are located the three most critical dropout points which jointly account for a loss of 64 percent of the students who come

TABLE 3

Student Losses at the End of the Quarters of Four Consecutive Years
Following College Entrance as Percentages of the Entering Classes.

Year—Quarter		End of Quarter Percentage Loss of Entering Class — Classes					
		1956	1957	1958	1959	1960	Combined
First Year—	Fall	07	14	03	06	03	07
	Winter	19	10	17	17	18	16
	Spring	19	33	30	20	26	26
Second Year—	Fall	01	06	03	00	01	03
	Winter	05	00	07	08	06	04
	Spring	25	16	19	20	27	22
Third Year—	Fall	00	01	04	01	00	01
	Winter	02	01	00	02	00	01
	Spring	01	05	02	01	04	03
Fourth Year—	Fall	01	00	00	01	00	00
	Winter	01	00	00	00	00	00
	Spring	—	—	—	—	—	—

to college. It would seem that barricades of some sort need to be erected at these points to halt the outflow of students.

Students who drop out of college begin to return after interruptions of one or two quarters and continue to return thereafter. The present study allows up to 19 quarters or six years for a return. Table 4 presents the number and percent of the 728 students who reentered from quarter to quarter. The last two lines of the table are added to indicate the relationship between withdrawals and reentries. The last line presents the withdrawals less the reentries and is to show the effect of dropping the drop-out designation for students who return and classifying them with students who persist from quarter to quarter.

Of the 605 students who withdrew from college, 166 or 23 percent of the entering group returned in the course of seven years. More than one-fourth or 27 percent of the students who withdrew reentered.

The length of the break in college attendance varies. Two years after entering college the first time, 40 students or six percent of the 728 students entered college the second time. Thirty-six students or five percent of the group reentered after three years. Eighteen students or two percent returned after an absence of one year. About 13 percent of the students who continue in college do so after taking out one to three years.

The record of reentry allowed only the Classes of 1956 and 1957 seven years in which to return to college, which is three years beyond the time normally required for completing the college program. The other classes had two, one, and no years respectively beyond the four years. The combined group thus does not rep-

TABLE 4

Student Reentry after Withdrawal and an Interruption of College in College Classes over a Period of Seven Years.

Year—Quarter		Reentry in College—Classes											
		1956		1957		1958		1959		1960		Combined	
		(N 136)		(N 161)		(N 146)		(N 122)		(N 163)		(N 728)	
		N	%	N	%	N	%	N	%	N	%	N	%
First Year	Fall	00	00	00	00	00	00	00	00	00	00	00	00
	Winter	00	00	00	00	00	00	00	00	00	00	00	00
	Spring	00	00	03	02	00	00	00	00	00	00	03	01
Second Year	Fall	02	01	01	01	02	01	01	01	01	01	07	01
	Winter	01	01	02	01	01	01	00	00	02	01	06	01
	Spring	03	02	03	02	00	00	01	01	00	00	07	01
Third Year	Fall	02	01	04	02	03	02	03	02	06	04	18	02
	Winter	01	01	02	01	02	01	01	01	01	01	07	01
	Spring	01	01	01	01	03	02	01	01	01	01	07	01
Fourth Year	Fall	06	04	05	03	10	07	13	11	06	04	40	06
	Winter	00	00	02	01	00	00	00	00	04	02	06	01
	Spring	00	00	01	01	00	00	00	00	01	01	02	01
Fifth Year	Fall	23	17	06	04	03	02	04	03	—	—	36	05
	Winter	00	00	00	00	03	02	02	02	—	—	05	01
	Spring	00	00	00	00	02	01	02	02	—	—	04	01
Sixth Year	Fall	05	04	03	02	02	01	—	—	—	—	10	01
	Winter	00	00	02	01	00	00	—	—	—	—	02	01
	Spring	01	01	00	00	01	01	—	—	—	—	02	01
Seventh Yr.	Fall	02	02	02	01	—	—	—	—	—	—	04	01
	Winter	00	00	00	00	—	—	—	—	—	—	00	00
	Spring	00	00	00	00	—	—	—	—	—	—	00	00
Reentries Totals		47	35	37	23	32	22	28	23	22	13	166	23
Withdrawals Totals		109	80	141	88	124	85	93	76	138	85	605	83
Withdrawals Reentries		62	46	104	65	92	63	65	52	116	71	439	60

resent fairly what happens when ample time is allowed for re-entry.

When attrition is looked upon as not including students who return after an interruption of college attendance, the dropout figures are reduced considerably from those indicating withdrawals as treated above. This change is accomplished by subtracting from the number of withdrawals the number of reentries. Table 5 shows what happens when this procedure is used.

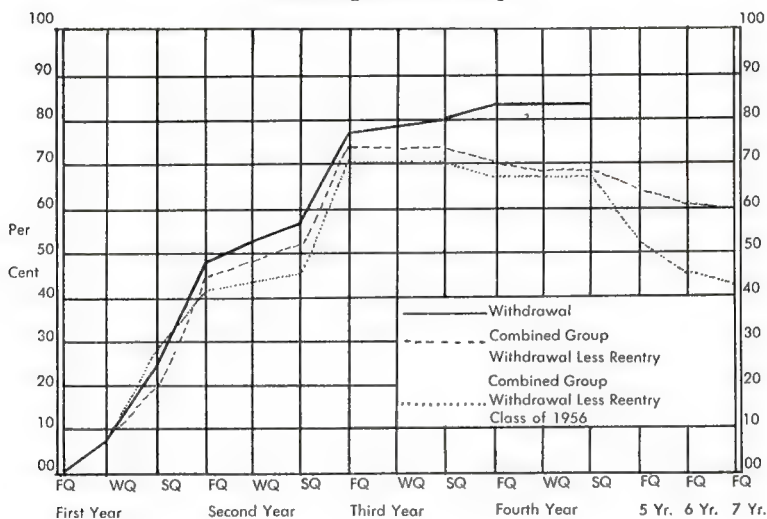
Losses by the above procedure are reduced from 83 percent to 60 percent for the combined group. In the Class of 1956, where there was the longest time in which to return to college, the loss of students is reduced from 80 percent to 46 percent. The three curves in Figure 1 show graphically the percentages of withdrawal over a period of four years for the combined group, the withdrawal less reentry for the combined group over a period of seven years, and withdrawal less reentry for the Class of 1956 over a period of seven years.

TABLE 5

Student Withdrawal and Student Reentry and Student Withdrawal Less Reentry for the Class of 1956 and for the Combined Group

		Class of 1956 (N 136)						Combined Classes (N 728)					
		Withdrawal			Reentry			Difference			Withdrawal		
Year—Quarter		N	%	N	%	N	%	N	%	N	%	N	%
First Year—	Fall	00	00	00	00	00	00	00	00	00	00	00	00
	Winter	09	07	00	00	09	07	48	07	00	00	48	07
	Spring	35	26	00	00	35	26	165	23	03	00	162	22
Second Year—	Fall	61	45	02	01	59	43	355	49	10	01	345	47
	Winter	63	46	03	02	60	44	375	52	16	02	359	49
	Spring	70	51	06	04	64	47	410	56	23	03	387	53
Third Year—	Fall	103	76	08	06	95	70	565	78	41	06	524	72
	Winter	104	76	09	07	95	70	574	79	48	07	526	72
	Spring	106	78	10	07	96	70	579	80	55	08	524	72
Fourth Year—	Fall	108	79	16	12	92	68	602	83	95	13	507	70
	Winter	109	80	16	12	93	68	605	83	101	14	504	69
	Spring	109	80	16	12	93	68	605	83	103	14	502	69
Fifth Year—	Fall			39	28	70	51			139	19	466	64
	Winter			39	28	70	51			144	20	461	63
	Spring			39	28	70	51			148	20	457	63
Sixth Year—	Fall			44	32	65	48			158	22	447	61
	Winter			44	32	65	48			160	22	445	61
	Spring			45	33	64	47			162	22	443	61
Seventh Yr.—	Fall			47	35	62	46			166	23	439	60
	Winter			47	35	62	46			166	23	439	60
	Spring			47	35	62	46			166	23	439	60

Figure 1. Student Withdrawal in a Group of 728 Entering Freshmen in Percentages of the Group



In summarizing the data that deal with the extent and rate of attrition, it may be said that in the course of four years the college loses 83 percent of the students who enter when the loss is measured by withdrawal from college. This loss, if reduced by students who reenter after withdrawal, becomes 60 percent. If reentries plus other replacements for withdrawals are deducted from the loss, the loss is further reduced to 36 percent. The greatest losses occur at the end of the first and second years in college.

Reasons for Withdrawal

The next phase of the study deals with the 605 students, or the 83 percent of the entering students, who withdrew from college during the four years after entrance. This is an attempt to find the reasons for withdrawals.

Information in regard to students and their reasons for withdrawing was obtained, when possible, from the Office of the Registrar and the Public Relations Office. In instances where this information was insufficient an effort was made to trace the student by contacting his home or friends and obtain from them the student's address. A questionnaire was then mailed to the student with the request that he fill in the information asked for. With the use of the college offices, family and friends of students, and the questionnaire, information regarding 439 students who had withdrawn was received. This group represents 60 percent of the entire entering group and 73 percent of the students who withdrew. No information was obtained for 166 cases of withdrawal or 23 percent of the group.

Students completing the questionnaire responded to the request "to specify the primary reasons for discontinuing attendance at Bethel College." Accompanying this item the questionnaire offered a list of 12 possible reasons and the opportunity to state other reasons. The reasons that applied were to be checked and ranked in order of importance. In the tabulations that follow in this report only the most important reason is considered. Table 6 lists the reasons given by the students with the frequency of each.

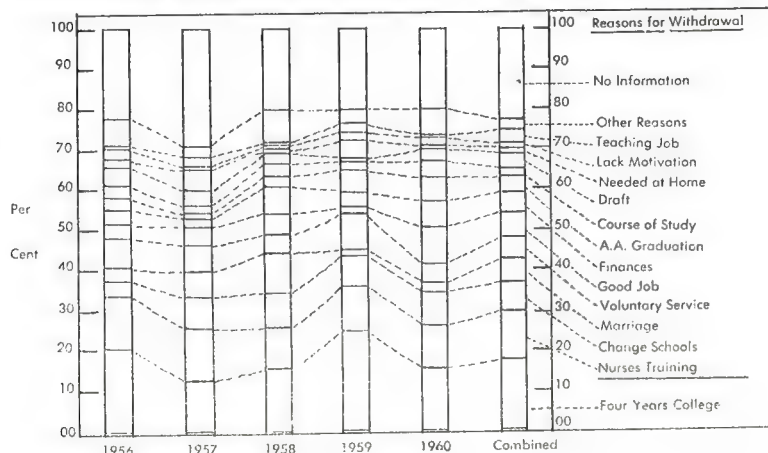
Figure 2 presents the information given in Table 6 in graphical form.

TABLE 6

Reasons for Withdrawal from College Given as Most Important by
605 Withdrawing Students with the Frequency of Each.

Reason	Number of Responses—Classes											
	1956		1957		1958		1959		1960		Combined	
	(N 136)		(N 161)		(N 146)		(N 122)		(N 163)		(N 728)	
	N	%	N	%	N	%	N	%	N	%	N	%
Nursing Education	16	12	21	13	15	10	15	12	18	11	85	12
Change of College	06	04	11	07	12	08	08	07	12	07	49	07
Marriage	06	04	12	07	16	11	02	02	06	04	42	06
Voluntary Service	10	07	09	06	06	04	10	08	07	04	42	06
Good Job	05	04	09	06	08	05	02	02	15	09	39	05
Financial Problems	33	02	03	02	12	08	35	04	11	07	34	05
A. A. Graduation	07	05	02	01	03	02	07	06	08	05	27	04
Course of Study	04	03	04	02	04	03	03	02	08	05	23	03
Draft	04	03	06	04	04	03	01	01	04	02	19	03
Needed at Home	03	02	06	04	02	01	05	04	02	01	18	02
Lack of Motivation	05	04	02	01	02	01	02	02	04	02	15	02
Teaching Job	02	01	04	02	02	01	02	02	02	01	12	02
No Graduat'n Intent.	01	01	01	01	02	01	02	02	04	02	10	01
Illness	01	01	02	01	02	01	01	01	00	00	06	01
Poor College Work	01	01	00	00	02	01	00	00	03	02	06	01
Decease	03	02	01	01	01	01	00	00	00	00	05	01
Suspended-Dismissed	01	01	00	00	00	00	02	02	01	01	04	01
Out of Harmony	00	00	01	01	00	00	01	01	00	00	02	01
No Reason Given	01	01	00	00	00	00	00	00	00	00	01	01
No Information	30	22	47	29	31	21	25	20	33	20	166	23
Total	109	80	141	88	124	85	93	76	138	85	605	83

Figure 2. Reasons for Withdrawal from College Given as Most Important by
605 Withdrawing Students with Frequency as a Percent of the Entering Class



The greatest loss of students was to nursing education, a program not offered by Bethel College. Over a period of five years there were in this group 85 students or 12 percent of the entering classes. These withdrawals represent students enrolled in the Diploma Nursing Education Program of the Bethel Hospital School of Nursing. The students do full-time work and are in residence at the college the first six months of the program. After the completion of two quarters, the group transfers to the hospital for the continuation of studies.

Seven percent of the entering students withdrew in order to enroll in other schools. The transfers may occur for reasons such as finding offerings too limited in a specialized field of interest, having a preference for leaving the community to go to college, transferring to the own church college, and others.

Marriage was given as the reason for withdrawing by 42 students or six percent of the students who come to college.

Another 42 students or six percent of the combined group interrupted college by volunteering two or more years of service activity under the auspices of the Mennonite Central Committee. This program affords young people unusual opportunities to participate in relief projects in many parts of the world and to broaden their appreciations and understandings. With only rare exceptions all students in the program returned to college after completing the term of service.

Smaller numbers of students left college because of good jobs offered them, financial problems, graduation from the two-year college programs, and other reasons as given in Table 6.

Twenty-three percent or 166 members of the entering class are not accounted for in the study because it was not possible at the time to obtain information concerning them. The reactions of these students, had they been available, might have changed somewhat the relative importance of a number of the reasons. Nevertheless, the picture as it is suggests factors which are decisive in discontinuing college attendance.

The study does account for 77 percent of the 728 students who came to college. Of these 17 percent graduated in four years and 60 percent withdrew from college for reasons given.

A summary of the study is shown in graphical form in Figure 3. Each character in the figure represents roughly ten percent of the students entering college.

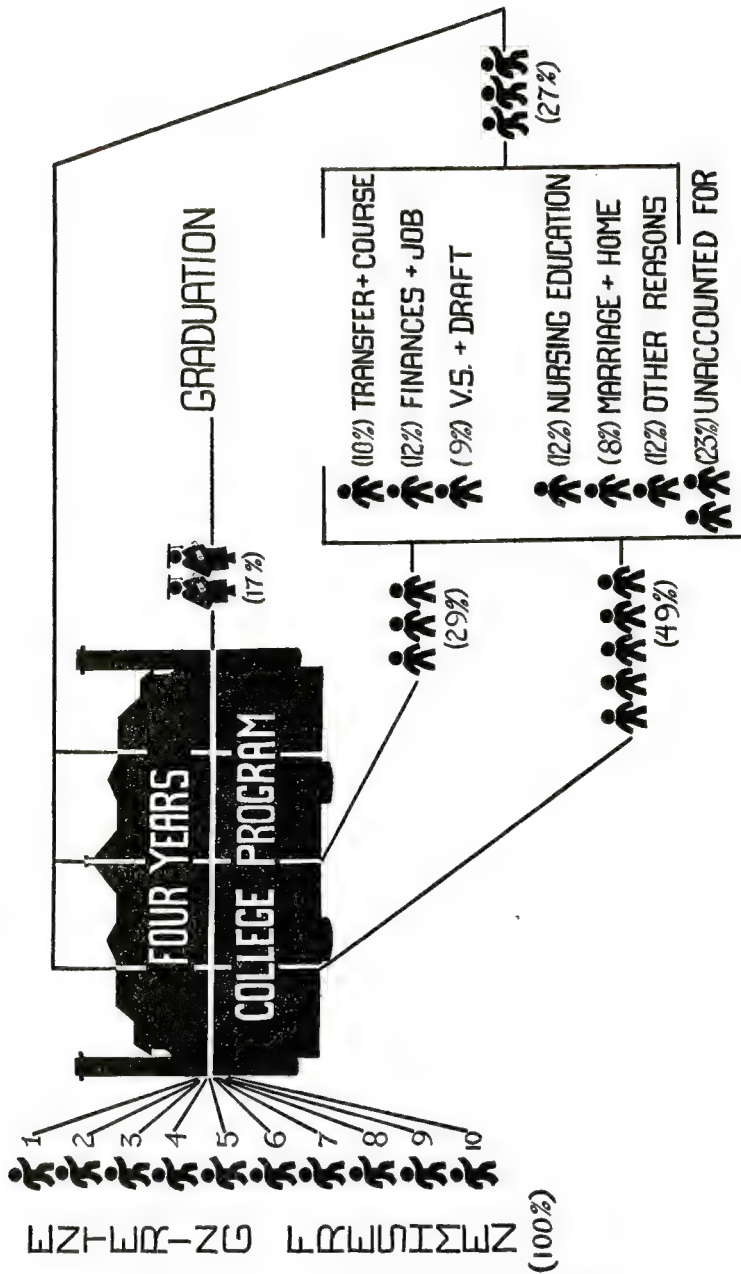


Figure 3. Student Retention, Withdrawal and Reentry in a Group of 728 Students Entering College over a Period of Five Years

The reasons for withdrawal in as far as they could be ascertained in this study make withdrawal appear far from unreasonable. It remains true, of course, that the withdrawing student has completed only a part of a four-year program at the time of dropping out. It is also true, however, that in many instances withdrawal represents a transfer to specialized vocational training programs after having had the benefits of limited college study. For other students withdrawal means taking advantage of experiences that constitute an inestimable enrichment of life. In the case of still others, withdrawal indicates that the student has taken advantage of college attendance to the extent to which the time and means at his disposal allow before having to assume full-time responsibilities outside the college world.

It is evident also that in the great majority of cases college attendance is not a program of being in college four years followed by graduation and then having college over with. College is an experience which extends over a number of years, and oftentimes many years, beyond the generally stated four years, for most people. This characteristic of the college experience should probably be taken into account in college planning.

The findings in this study indicate what was happening in student attrition at Bethel College during a defined five-year period. Changes from year to year in the extent of student dropouts and the reasons for it are the concern of the follow-up studies.

Completed questionnaires were received from 218 students. This represented a 55 percent return from the 376 individuals to whom questionnaires had been sent, 36 percent of the students who withdrew, and 30 percent of the entire group of entering freshmen. In addition to indicating reasons for withdrawing from Bethel College, these students reacted to items in the questionnaire dealing with such matters as living arrangements while at college, financial arrangements for college expenses, the worth of the college experience, conditions and services on the campus, the academic phase of the college experience, help received with problems while at college, sources of counselling help at college, transfer to another college, graduation from college, vocational plans at the time of entering college, present vocational plans, present job, and added comments to clarify answers. This information is the basis of another report.

MENNONITE STUDENTS IN NON-MENNONITE SCHOOLS

By Albert J. Meyer

INTRODUCTION

Most participants in this Cultural Conference have experienced personally life in non-Mennonite academic environments. Indeed, the present Conference on Mennonite Educational and Cultural Problems grew out of a small conference planned by several Goshen College faculty members and a few Mennonite graduate students at the University of Chicago in 1941. There have been many changes, however, both in the number of Mennonite students studying in non-Mennonite schools and in the nature of the experiences of these students in the last twenty years. In this paper, we will study some of these changes and ask ourselves what they mean for church activities in this area in the future.

I. AVAILABLE STUDIES

Since 1948, the Board of Education and Publication of the General Conference Mennonite Church has compiled an annual list of General Conference Mennonite students attending institutions of higher learning not affiliated with the General Conference. The institutions studied have included colleges, seminaries, universities, Bible schools, technical schools, and nursing schools. The results, primarily an address list, have been compiled from the returns from a questionnaire sent to General Conference pastors. From year to year, the response has varied from 44 per cent to 96 per cent.

In 1948, Melvin Gingerich of the Mennonite Research Foundation in Goshen made a study of the interest of (Old) Mennonite students in the intercollegiate athletics programs available in non-conference colleges. The response in that study represented 65 per cent of the (Old) Mennonite membership, and the names of 64 men attending non-conference colleges were found. This would imply that about 100 (Old) Mennonite men were studying in non-conference colleges in that year.

In 1953, the Collegiate Council of the (Old) Mennonite Board of Education appointed a small committee, headed by Paul Bender, to study (Old) Mennonite college students in the 1952-53 school year. The names of 232 students were found in this study. The

responses to the questionnaire sent to the pastors represented 78 per cent of the (Old) Mennonite membership. In order to provide for a check on the reliability of the data, the pastors were also asked to submit the names of all students from their congregations attending **Mennonite** schools. The names of these Mennonite students were also obtained directly from the schools, and it was found that the pastors reported the names of 74 per cent of the (Old) Mennonite students in (Old) Mennonite colleges. Assuming that the pastors reported the same percentage of their students in non-conference institutions, we would conclude that there were about 314 (Old) Mennonite students in non-conference institutions in 1952-53.

In the school year 1959-60, the (Old) Mennonite Student Services Committee began the annual preparation of a card file with more complete information on Mennonite students than had been obtained previously. The data from this file was obtained from (1) (Old) Mennonite pastors, (2) the General Conference student survey, (3) religious affairs officers or other officers of all universities that would supply this information, (4) the officers of Mennonite student fellowships, where the names of these officers were known, and (5) the alumni offices of Eastern Mennonite College, Hesston College, and Goshen College. In many cases, information about the field of study, parent's name and address, earlier attendance at a Mennonite college, marital status, year of birth, degrees and academic honors, and wife's or husband's name was obtained. In addition, the names of some Mennonites teaching on non-Mennonite faculties or otherwise active in university centers were included in one section of the file.

In the school year 1960-61, some Mennonite Brethren leaders started a temporary Southern District Student Services Committee. Questionnaires were sent to Mennonite Brethren pastors; the return represented 76 per cent of the Mennonite Brethren membership. The names of 458 students were included in this first listing of Mennonite Brethren students studying beyond high school.

II. SOME FINDINGS

1. The number of American young people in institutions of higher education has increased in the past decade. This is due both to an increase in the percentage of college age young people attending schools and to an increase in the college age population itself. The increase in college age young people attending schools is shown on the following table:

TABLE I
PERCENTAGE OF AMERICAN COLLEGE-AGE POPULATION
IN COLLEGE

Year	Percentage
1900	4%
1920	8%
1940	17%
1960	34%

The increase in the college age population, the so-called "baby boom," will be much more important in the coming decade than it has been in the recent past. The numbers of young people in the 18-21 age group, projected on the basis of the 1950 census, are given for several states in Table II.

TABLE II
YOUNG PEOPLE OF COLLEGE AGE IN STATES OF LARGE
MENNONITE POPULATIONS¹

State	College Age Population (Thousands)				
	1950	1955	1960	1965	1970
Pennsylvania (30,641) ²	604	535	583	681	767
Kansas (14,840)	111	104	104	130	153
Ohio (12,399)	431	400	480	617	760
Indiana (10,165)	228	217	261	325	397

¹Ronald B. Thompson, "Numbers of College-Age Youth and College Enrollments Projected to 1975," *The College Blue Book*, Ninth Edition, 1959, pp. 921-932.

²The numbers in parentheses beneath the names of the states are the numbers of (Old) Mennonites, General Conference Mennonites, and Mennonite Brethren members in these states in 1957.

The most recent results,¹ based on the 1960 census, show that the actual statistics for 1960 and the years following need to be modified somewhat, but Table II gives an adequate picture of the trend.

¹Ronald B. Thompson, *Enrollment Projections for Higher Education, 1961-1978*, The American Association of Collegiate Registrars and Admissions Officers, September 1961.

2. In the last decade, the increase in the number of Mennonites at non-conference schools has been greater than the increase in college attendance in the American population as a whole.

Consider first the data for the General Conference Mennonites. In 1949-50, a questionnaire with a 71 per cent response yielded the names of 450 General Conference students in non-conference colleges and universities (including graduate schools, medical schools, and university divinity schools). A similar questionnaire in 1950-51 with a 67 per cent response gave the names of 397 such students. The average number of students found by these questionnaires in these two years would then have been 424. If the numbers of these students had increased at the rate of increase in opening enrollment of degree-credit students in all American institutions of higher education over this period (using information from the United States Office of Education²) there would have been about 618 of these Mennonite students in 1950-60. Actually, a questionnaire with a 69 per cent response gave the names of 660 students in 1959-60; the increase in General Conference college and university students in non-conference institutions was slightly greater than the increase in college attendance in the American population at large.

There is another factor which has changed the picture of the General Conference for the past decade to a certain degree. In the period 1949-51, there was an average number of 183 General Conference students in non-conference Bible institutes. In 1959-61 the average was 105. (The percentage responses were comparable; the statistics given here are for the names actually received from the questionnaires.) The sharp decrease in attendance at non-conference Bible institutes in a period of rapidly increasing school attendance generally means, for the General Conference as a whole, that the increase in General Conference student attendance at non-conference institutions of all kinds has not kept up with the rate of increase in college and university enrollments in the nation as a whole.

On the other hand, the increase in (Old) Mennonite attendance at non-conference institutions has been remarkable. We have already noted that, correcting for the lack of a 100 per cent response to the questionnaire, there were probably about 314 (Old) Mennonite students in non-conference schools in 1952-53. If the increase in (Old) Mennonite students in non-conference schools had followed the increase in opening enrollment of degree credit students in all American institutions of higher education during this period, there would have been about 534 (Old) Mennonite

²Edith M. Huddleston, "Opening College Enrollment, Fall 1960," *Higher Education*, January 1961.

students in non-conference schools in 1960-61. Later in this paper, we estimate the actual figure for 1960-61 at 735. This represents a very significant increase. For example, it is a much greater effect than the decreased attendance of General Conference students at non-conference Bible institutes.

3. In this paper, we are interested primarily in Mennonite students in non-Mennonite schools. Detailed information on Mennonite students in the schools of their conferences has not been obtained except for the school year 1960-61. Nevertheless, we can note that, at least for the (Old) Mennonites, the increase in attendance at non-conference schools has been greater than the increase in attendance at the conference schools of this branch.

In his "Study of Mennonite College Students," Paul Bender concludes that in 1953 there were about one-sixth more Mennonites attending non-Mennonite schools than there were when Melvin Gingerich did his study in 1948. In arriving at this conclusion, however, Bender assumed that the numbers of men and women in non-conference schools in 1948 were about equal. The present study shows that in 1960-61, the ratio of men to women in non-conference schools was about 5 to 2. (The ratio for the students in undergraduate colleges was roughly the same.) This would mean that, if the kinds of schools in the two studies were comparable—that is, if technical institutes and other kinds of specialized schools were included in 1948 to the extent they were included in 1953—the increase in attendance at non-conference schools in this period would have been considerably greater than that given by Bender. In the absence of better information on the kinds of schools attended, the data are inconclusive.

TABLE III

**TREND IN (OLD) MENNONITE ATTENDANCE AT SCHOOLS
NOT SPONSORED BY (OLD) MENNONITE CONFERENCES
OR BOARDS**

Year	Percentage of (Old) Mennonite Students Attending Non-Conference Schools
1952-53	26% ¹
1955-56	25% ²
1960-61	36% ³

¹From "Study of Mennonite College Students," a report presented at the Collegiate Council Sectional Meeting, Mennonite Board of Education, October 16, 1953, p. 8. This report was prepared by an appointed committee with the following members: Paul Bender, chairman, Ira E. Miller, Daniel D. Driver.

²Bender, Paul, "Report to the Study Commission on Mennonite Higher Education," January 3, 1956, pp. 78, 79.

³See calculation in Table IV.

The trend in (Old) Mennonite attendance since 1952 is given in Table III. About 25 per cent of these students were in non-conference schools until 1955-56; then the percentage rose to 36 per cent.

4. The three largest Mennonite branches differ in the percentage of their students in schools not sponsored by their conferences. The data for the school year 1960-61 are given in Table IV. Only about 36 per cent of (Old) Mennonite students are in schools not sponsored by their conferences, while 46 per cent of the Mennonite Brethren students and 54 per cent of the General Conference students are studying in non-conference institutions.

TABLE IV
**ESTIMATE OF NUMBER AND PERCENTAGE OF MENNONITE
STUDENTS IN SCHOOLS NOT SPONSORED BY
THEIR CONFERENCES, 1960-61**

	Data from Pastors ¹	Percentage Response from Pastors ²	Data Corrected for Percentage Response	Data Corrected for Pastors' Omissions ³	Students in Conference Schools ⁴	Total Number of Students	Percentage in Non- Conference Schools
General Conference	981	78%	1260	1320	1135	2455	54%
(Old) Mennonite	559	80%	700	735	1281	2016	36%
Mennonite Brethren	458	76%	605	635	751	1386	46%
Totals				2690	3167	5857	46%

¹The data for (Old) Mennonite students include names from university offices and from officers of campus Mennonite groups as well as from Mennonite pastors.

²This column does not give the percentage of pastors who responded, but rather the percentage of the church membership represented by the response of the pastors. The figure in the (Old) Mennonite row is a rough estimate.

³In a study of (Old) Mennonite college students made by Dr. Paul Bender in 1953 it was found that the pastors who responded omitted an average of 4%-9% of the names of students from their congregations. In the present calculation the data are increased by 5% to correct for this.

⁴These numbers were obtained directly from the schools in question. Again, the (Old) Mennonite figure is an estimate rather than an exact number; the uncertainty in this case, however, is less than the uncertainty in the estimate in the percentage response column.

Table IV also indicates that the total number of students in these three largest branches is about 5857, and that about 46 per cent of these are in schools not sponsored by their conferences.

TABLE V

**TYPES OF SCHOOLS ATTENDED BY (OLD) MENNONITE
STUDENTS IN NON-MENNONITE SCHOOLS, 1960-61**

Type of School	Single		Married		Marital Status Unknown		Total
	Men	Women	Men	Women	Men	Women	
Graduate	14	11	47	3	4	1	80
Medical	25	1	48	0	8	1	83
Theological Seminary	1	0	7	0	1	0	9
Undergraduate	73	33	23	7	12	3	151
School of Nursing	3	58	1	1	3	2	68
Trade School	1	3	1	0	1	0	6
School Unknown	65	17	47	7	23	3	162
Total	182	123	174	18	52	10	559

TABLE VI

**TYPES OF SCHOOLS ATTENDED BY GENERAL CONFERENCE
MENNONITE STUDENTS IN NON-CONFERENCE SCHOOLS,
1960-61**

Type of School	Students
Graduate	80
Medical	49
Theological Seminary	9
College and University	618
Bible Institute	92
School of Nursing	82
Trade School	51
Total	981

5. Tables V and VI indicate the types of schools (Old) Mennonite and General Conference Mennonite students in non-conference institutions attend. Some of the means of obtaining the names of (Old) Mennonite students do not provide the names of types of schools attended; this explains the large number of students in the "School Unknown" category. The General Conference listing gives information supplied by the pastors. The "College and University" category was intended to be the category in which only undergraduates would be placed, but it is possible that some pastors may have listed some of their graduate students in this category in cases of doubt.

The breakdown in Table V gives further information for (Old) Mennonites. There were 408 men and 151 women. In all, there

were 305 single students, 192 married students, and 62 whose marital status was unknown.

6. Table VII lists the non-Mennonite schools with known Mennonite student population of ten or more. The data is obtained from the student surveys for 1960-61 of the General Conference, the (Old) Mennonite and the Mennonite Brethren student services committees. The numbers listed are in each case minima; from the percentage response to the questionnaires on which the figures are based at least in part, one could estimate that the numbers represent about 75 per cent to 80 per cent of the student populations in each case. It should also be noted that students from the smaller Mennonite branches are not listed.

Where there are five or more Mennonite students in one school or three or four Mennonites in a school in a city in which there are other schools with more Mennonite students, let us say that a "concentration" of Mennonite students exists. A much more detailed listing than that given in Table VII, a listing of all the concentrations of Mennonite students, indicates that about 66 per cent of the Mennonite population studied is in concentrations.

TABLE VII

SCHOOLS KNOWN TO HAVE LARGE MENNONITE STUDENT POPULATIONS, 1960-61

State and School	GC	MC	MB	Total
UNITED STATES				
California				
Reedley College, Reedley	11	0	27	38
Fresno State College, Fresno	4	0	31	35
Bakersfield College, Bakersfield	0	0	13	13
Colorado				
University of Colorado, Boulder	1	9	0	10
Illinois				
University of Illinois, Urbana	11	12	1	24
Indiana				
Indiana University, Bloomington	8	10	0	18
Purdue University, Lafayette	10	8	0	18
Indiana University, Indianapolis	2	12	0	14
Iowa				
State University of Iowa, Iowa City	4	14	0	18

Kansas

Hutchinson Junior College, Hutchinson	41	0	2	43
Kansas State University, Manhattan	31	1	5	37
University of Kansas, Lawrence	23	6	3	32
University of Wichita, Wichita	22	0	1	23
Kansas State Teachers College, Emporia	15	0	5	20

Michigan

University of Michigan, Ann Arbor	3	17	0	20
Michigan State University, East Lansing	7	7	0	14

Minnesota

University of Minnesota, Minneapolis	12	2	2	16
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Nebraska

Grace Bible Institute, Omaha	52	0	9	61
University of Nebraska, Lincoln	9	2	1	12

Ohio

Ohio State University, Columbus	8	17	0	25
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Oklahoma

Southwestern State College, Weatherford	6	1	23	30
Oklahoma State University, Stillwater	6	0	5	11

Oregon

Oregon State College, Corvallis	3	6	1	10
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Pennsylvania

University of Pennsylvania, Philadelphia	2	19	0	21
Pennsylvania State University, State College	3	14	0	17
University of Pittsburgh, Pittsburgh	1	9	0	10
Temple University, Philadelphia	3	7	0	10

Virginia

Medical College of Virginia, Richmond	0	11	0	11
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CANADA**Alberta**

University of Alberta, Edmonton	11	14	21	46
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British Columbia

University of British Columbia, Vancouver	21	0	19	40
Vancouver General Hospital, Vancouver	4	0	7	11

Manitoba

University of Manitoba, Winnipeg	30	0	25	55
United College, Winnipeg	14	0	7	21
Manitoba Teachers College, Winnipeg	7	0	6	13
Misericordia Hospital Sch. of Nursing Winnipeg	7	0	4	11

Ontario

University of Toronto, Toronto	5	10	4	19
Waterloo College, Waterloo	10	1	4	15
Stratford Teachers College, Stratford	2	8	0	10

Saskatchewan

University of Saskatchewan, Saskatoon	34	1	5	40
University of Saskatchewan School of Nursing, Sask.	9	0	1	10
Saskatoon Teachers College, Saskatoon	8	0	2	10

7. As a part of the present study, the author has prepared a list of the locations of all the known Mennonite student concentrations in the United States and Canada. (The number of locations is much less than the number of schools involved, since there are often two or more schools at one location. (In connection with each location, the following items are listed: the nature of the student fellowship, if any exists; the frequency of meeting; the leader (president or chairman, as the case may be); the average attendance at the meetings of the fellowship; and the name of a permanent resident in the location who is interested in the Mennonite student fellowship.

Summarizing very briefly the results of this detailed listing, we can note that student concentrations were located in 48 places in the school year 1960-61, that there were Mennonite student fellowships in 27 of these locations, and that 11 or 12 of these student fellowships were started in the last two years. Most of the Mennonite student fellowships meet monthly, although several meet more frequently; and a few meet weekly for church services of their own or as important parts of small Mennonite congregations in the area.

In discussing the student concentrations and student fellowships, it should be noted that the numbers of adult Mennonites at the larger university centers are considerably larger than the figures listed on Table VII. There are husbands and wives of students, and younger and older Mennonites living and sometimes working in the campus areas. For example, Table VII would indicate that 20 students are at the University of Michigan in Ann Arbor. Actually, there are at least 58 adult Mennonites living in or near Ann Arbor. Furthermore, the data for Canada is probably less complete than the data for the United States. People who have visited the students in Winnipeg and Vancouver say that the numbers of students in these centers are much larger than the numbers given in Table VII.

III. SOME STUDENT ORGANIZATIONS AND ORGANIZATIONS INTERESTED IN STUDENTS

As in the case of other Mennonite young people's activities, there were groups of Mennonite students that met for one or more meetings decades ago. In general, however, most of the history of Mennonite student activities is quite recent.

The large Mennonite student fellowship in the Philadelphia area met at monthly intervals in the early 1950's. In 1953, this group asked the (Old) Mennonite Board of Education to consider opening a student center in Philadelphia. The center was opened and it was successful in many ways, but it was closed in 1956 or 1957, largely because (like other educational ventures in the church) it was not self-supporting. Because the (Old) Mennonite Board of Education was engaged primarily in operating its two colleges, the task of maintaining contacts with students in non-Mennonite schools was assigned to the (Old) Mennonite Board of Missions and Charities at Elkhart, Indiana. A student services committee was formed by this board in August 1958.

It was evident from the start that the work with university students would involve close cooperation with representatives of the other large Mennonite branches. Partly at the encouragement of the Elkhart Student Service Committee, and partly in response to a need that was evident, the General Conference Student Services Committee was organized in January 1960. An informal student services committee was also formed by the Southern District of the Mennonite Brethren in 1960. The General Conference and (Old) Mennonite student services committee hold a joint meeting annually, and the Mennonite Brethren were represented at the last of these joint meetings.

The student services committees have had many activities in addition to conducting their annual student surveys and preparing the mailing lists of students. Representatives of the committees make one- to three-day visits to student fellowships to lead discussions, present papers on the relationship of the Christian faith to various academic disciplines, and assist the student groups in other ways. Probably the most important activities in these visits are the private conversations with individuals or groups of two or three students at a time over coffee and at meals. Most of the eleven or twelve student fellowships started in the last two years owe their existence in part to the activity of the student services committees. For the benefit of groups already in existence, the committees give suggestions for speakers and help student fellowships share their program ideas with each other. This is done partly through a newsletter issued jointly by the three committees about three times each school year.

In the future, the student services committees want to hold more

discussions with students in the Mennonite colleges who are planning to do graduate work. They may also be able to suggest to the colleges ways in which they could better prepare students for the experiences they will face in non-Mennonite academic environments. The student services committees are also tentatively planning a summer two- or three-week theological seminar for university students.

The fellowships of Mennonite students in Canada are called Association of Mennonite University Students (AMUS) groups. One of these AMUS groups was begun at the University of Manitoba in 1950, and two others began at Toronto and the University of Alberta around 1956. These groups have monthly meetings with papers and discussions; in addition, one of these groups had a retreat last year and a program of speaking engagements in the Mennonite churches in the area. Although the different AMUS groups have a common name, they are quite independent of one another except for students who happen to visit one of the other campuses or to transfer from one campus to one of the others.

An important development for Mennonite students in the United States has been the growth of the Mennonite Graduate Fellowship. This group began in a small meeting of about eight Mennonite students at Cornell University in April 1958. Actually, the interests of these first members were very much like those of the graduate students who met in Chicago in the small conference that led to the Conference on Mennonite Educational and Cultural Problems. They could also be compared with the "Concern" group, which had begun in the spring of 1952 in Europe and was known for a number of years as "American Mennonite Students in Europe." After the first year or two, all American Mennonite students in study in universities or former students doing relief work for the Mennonite Central Committee were invited to the Concern meetings. In the school year 1956-57, German Mennonite students were also invited, and, although most of the American students interested in the group had left Europe by 1958, the meetings of the German Mennonite students and the remaining American students have continued. In America, the first two large meetings of the Mennonite Graduate Fellowship were held on days immediately preceding or following the meeting of young people associated with the Concern group.

The first large meeting of the Mennonite Graduate Fellowship was held at the Ohio State University in Columbus during the Christmas vacation of 1958. The next large meeting was at a student residence near the University of Chicago a year later; the papers at this meeting discussed the impact of biological evolution on four or five different academic disciplines. The last large meeting, which was devoted to papers on "Psychology and

the Christian Faith," was held at the University of Pennsylvania in Philadelphia during the Christmas vacation of 1960. About 110 people, mostly graduate students and medical students, attended these sessions. The next meeting is to be held this coming Christmas vacation at the State University of Iowa in Iowa City. Exhibitions and papers concerning the fine arts will be featured at this meeting, which is on the general theme, "Christianity and Creativity."

The Mennonite Graduate Fellowship, and each of the AMUS groups or Mennonite student fellowships are student organizations. They were begun at student initiative and are led by student officers elected by the student members. The student services committees follow these developments with interest and assist in the mailing of announcements concerning the Mennonite Graduate Fellowship meetings.

Steps toward the development of an educational structure new to American Mennonites are in progress at the University of Waterloo in Ontario. Several denominational groups including the Mennonites have been invited to establish church colleges on the campus of this new provincial university. Of these, the Catholics, the Anglicans, and the United Church have already made definite agreements with the University. Six Mennonite branch groups in Ontario have taken preliminary steps toward the formation of a "Conrad Grebel College." The Mennonite groups have appointed delegates to a provisional board; a four-acre area on the University campus has been reserved as a site for the Conrad Grebel residence, study, and worship facilities; and the drafting of tentative affiliation agreements and other papers has begun.

Following the English pattern, the church colleges on the Waterloo campus will be residential institutions. Each college may develop its own liberal arts program, provided only that such developments meet the academic requirements set by the University Senate. The Roman Catholics have considered offering courses in philosophy, psychology, medieval history, and religious knowledge. Initially, the Mennonite college will have an instructor in religious knowledge, at least; the tentative plan would provide for instructors in some other areas as well.

In addition to their instructors at Conrad Grebel, the Mennonites may encourage qualified members of their denomination to join the University faculty and to cooperate informally with the Conrad Grebel work. Dr. Norman High, an (Old) Mennonite teaching at Guelph until this past year and the chairman of the executive committee of the provisional board of Conrad Grebel, has recently been called to the academic deanship of the liberal arts faculty of the University of Waterloo.

In addition to planning for the administration of Conrad Grebel

College, the provisional board is also interested in "providing a physical and symbolic center for students from Mennonite churches . . . attending other Universities and Institutions of higher learning in Ontario."³ The Conrad Grebel Chaplaincy Committee has been functioning as a student services committee for the Ontario area in making contacts with Mennonite students at Toronto, Guelph, London, and other centers, and helping them arrange for visiting speakers for their meetings. The influence of the Waterloo developments has extended beyond the campus of the University of Waterloo.

IV. INTRODUCING SOME UNIVERSITY STUDENTS

We are interested in people, however, not alone in statistics and generalizations. Let us consider some students as individuals. These portraits are as fair and accurate as possible, even though some facts have been purposely changed in order to make the actual identities of the people unrecognizable. In some cases, the portrait is a composite one.

Student X is a graduate of a church college and a medical student at one of the larger centers. He was a student leader during his undergraduate days, but now finds that his studies limit his participation in extracurricular activities. There are no Mennonite churches in the immediate area, so he attends the nearest Methodist church on Sunday mornings with a couple of his roommates, also Mennonite college graduates. They do not participate in the church except on Sunday morning. They study Sunday afternoons and sometimes work in a rescue mission emergency room Sunday evenings. There is a Mennonite fellowship in the area which meets roughly monthly. The meetings are largely social in nature, although there is usually a devotional meditation included on the program, and sometimes an outside speaker is present. Student X participates actively in the Christian Medical Association chapter at his school. He is one of its top leaders, and this is his main activity with other Christians.

I had a little trouble finding Student Y. He did not fill out a religious preference card at the beginning of the year indicating that he was a Mennonite. I finally found his phone number from the student directory. When I called, someone replied, "Hello. This is Xi Delta Epsilon." It was about 10 o'clock Saturday night. The person answered that Y had been in, but that he had left and would probably be out for several hours. I tried again at midnight. I left Sunday school the next morning and tried again from the church office. I was told that he was asleep, so I said I would

³*Annual Report of Conrad Grebel College Provisional Board to Participating Groups in Ontario*, June, 1961, p. 4.

call later. When I finally got him just after noon, and invited him to a home near the campus for a get-together with some of the other Mennonite students, he said he had heard about it by post card, had wondered what it was, and had then found himself with another appointment he could not break. I might just add that I had this experience not once but several times on this campus. One fellow said, "Well, I've changed my religion." I asked him if he went to a church of another denomination. "No, I've changed my religion completely." On another occasion, another fellow who is a member in good standing of an (Old) Mennonite congregation told me, "My name must be on some crazy Mennonite mailing list. They keep sending me invitations to some kind of fellowship meetings."

I might just add at this point that student leaders sometimes need to be encouraged to drop names from their mailing lists. One arrives at a center and finds the group has a list of thirty names. Eliminating the names of non-interested commuters and of ex-Mennonites who have already joined other churches or who have "changed their religion completely," we may have fourteen names left. Naturally the majority on the mailing list will never favor more than a social get-together—if that. The group badly needs a list of names of the real members (maybe keeping the old list for occasional social meetings of ex-Mennonites), the members really interested in going farther in a spiritual fellowship.

Student Z goes with his family to a Mennonite congregation over twenty miles from the university town on Sundays. He does have contacts with some of his fellow graduate students during the week, however. In fact, several of them treat him as a kind of father-confessor, discussing with him quite frankly some of their marital and vocational problems. They would never think of accepting his religion, but they seem to appreciate his advice at times.

Student A has been doing very good work in his doctoral studies, and was asked to teach at a Mennonite college. He had felt very badly prepared academically for graduate school when he had first arrived from a Mennonite college. After several years of concentrated study, he had passed his doctor's preliminary examinations, and from then on he had been increasingly involved in his doctoral research. There was a student fellowship in his town. It was made up almost entirely of alumni of his undergraduate Mennonite college who were now at the university. (There were quite a few members of other Mennonite groups at the university, but they were not interested in attending because the conversation always seemed to center about babies and the undergraduate days at the old Alma Mater.) The fellowship group met roughly monthly and was social in nature. In any case, Stu-

dent A was so busy with his studies and evening work in the library that he was not able to participate very actively and often was not present. He wanted to continue in university research. He raised the question of Mennonite college teaching with me on his own, but it was pretty clear that he had already decided in the negative.

Student D is not typical, but he is not alone. A graduate of a church college, he told me that he was running into constant references to Freud and Darwin in his medical studies. He told me that he had received a full objective treatment of neither of these intellectual giants at college. He thought the best courses he had had at college were courses in fine arts and philosophy, but that it had happened that Freud and Darwin had not come up for discussion in either of them.

Student E is another church college graduate. There is no Mennonite church near his university. He and several Mennonite friends decided that, rather than to go to a church of another denomination or go over twenty miles to the nearest Mennonite church, they would hold Sunday services in one of the homes. When I visited them, they were conducting their own Sunday school and church services. Half of the time they were inviting outside Mennonite ministers in to preach for them, and half of the time members of the group did the preaching. From its beginning, like almost all other Mennonite student fellowship groups, this group has had members of several Mennonite branches in its membership.

There are many more student situations that could be described. One student who desperately needs the money is singing in a choir of a Lutheran church in his university town; another is now singing in a Christian Science choir for this reason. Some students with seminary training preach in churches of other denominations near their university towns to earn money to stay in school and support their families. Of course, many students spend their week ends at home. Some students are married and have children. The wife works to keep her husband in school. She has her associates at the office and he has his in his work. Sometimes his work keeps him in the library or laboratory until ten or eleven o'clock almost every night. This situation is very common; in a few instances it has led to tension, separation, or divorce.

Before concluding the discussion of student situations, we should note that there are some university centers where there are Mennonite congregations and pastors who are interested in the students. In these situations, the student fellowship is often one of the church's special interest groups.

V. WHAT SOME STUDENTS SAY

Some Mennonite university students have done some reflective thinking about their situations. The following are some comments of Herbert Minnich at the 1958 meeting at Cornell that led to the formation of the Mennonite Graduate Fellowship:

One factor that has produced our mutual concern is the common experience of leaving the sheltered Mennonite community, "a cultural island," where our acquaintances and experiences were predominantly Mennonite-oriented. Even though we knew we were members of a cultural minority, it was not until we got into graduate school that this sense of being "odd balls" hit us in full force. As we expected, we discovered the existence of cultural and spiritual alienation from the university crowd. But as time passed we also began to feel something of a cultural alienation developing between ourselves and the group from which we came. In many cases, we were not expecting this disconcerting experience. In sociological terms, we may say that we began to feel the pressures experienced by "marginal men." We have been forced to straddle two ways of life, and we find ourselves unable to accept and unwilling to reject either one in its entirety. . . . When friends at school ask us about Mennonites, we find ourselves telling them about our culturally unique things—after all, the fact that we are Christians is hardly unique—and soon we find ourselves thinking, "Of course, I am not dedicated to **all** those things myself."

But in spite of this sense of estrangement, there is still a strong urge to be a part of our brotherhood for we know that we will never really feel at home among the university crowd (indeed, we don't want to).

For some of us, these social and cultural problems generate spiritual problems. Often the "folks back home" reinforce our apprehensions by insisting that the difficulties are due merely to "straying away from the Lord and becoming worldly." We believe that for the most part, this is erroneous, because it fails to take into account the complexity of the factors involved. However, we clearly recognize that part of this problem may be due to spiritual maladjustment. Life in a university forces Christians to develop personal, inner sources or spiritual strength, rather than to rely merely on daily chapel services and regular revival meetings for their spiritual growth.

The above factors all tend to deprive us of what may be spoken of as a "reference group." Humans need a group of fellows toward whom they can look for direction and support. The marginal man is without a definite, satisfying reference group.

The following are statements from other Mennonite students:

1. . . . We can hardly conceive of a greater challenge to the Christian church at this time than the challenge to present Christ and the way of Christian love and discipleship to the several millions who teach and study in our many colleges and universities. As Christians, we can have no illusions of education as the great liberator, the panacea for the

world's ills. Who could be more enslaved and provincial in his vision than the typical research scholar? And we all know the sort of raw individualism that higher education seems to develop and foster. In many ways higher education tends to refine the "old man" in us and bring him into his own. Certainly, we must confess, if we are honest, that the university campus is characterized more by anarchy than community, competition than cooperation, frustration than peace of mind, and confusion than understanding and insight. How well do graduate students know the bitter rivalry and back-stabbing that goes on among faculties of many distinguished departments, where all the prestige and status that one could desire are to be had. Students are shown multitudinous ways, but all are declared imperfect or inadequate at some point and with destinies unknown. . . .

To us of Anabaptist heritage, it should be at once evident what the challenge is. We can hardly overestimate the influence that the students and faculties of our universities today are going to have on the future of our nation and the world. . . . One might ask whether there be a more crucial place at this time than the university campus for demonstrating the way of the cross.

As Christians, I believe it is our urgent task to exercise a redeeming influence on the university campus. We have, I believe, the answer to the directionlessness, the disunity, and the frustration, and we need to express our answer in ways that are relevant to and compatible with the university situation. It is my experience that there are many persons in a university who are sincerely seeking meaning in life. . . . We must not pass up the great challenge before us.

How then shall we witness? I believe we must utilize to the fullest the university's most potent weapon, the informal bull session, or, if you prefer, seminar. . . . We should establish small groups, call them what you will, "reference groups," or "house-churches," which exemplify in discussion and action the principles of the Kingdom in terms that meet the felt needs of our non-Christian associates. . . . 2. . . . Usually the student's personality exfoliates in the sunlight of the wider awareness of life. If the transition is too violent, the symptoms of his response may become quite unlovely. He may grasp for "culture," attempting to make up for lost time in his youth, feeling that the refinement of his tastes in line with those of the *beau monde* is necessary for the maintenance of his position among the intellectually elite. Or he may rush off to buy his children violins and books of art masterpieces, in order to make sure they receive the "advantages" he missed. (A caricature, but not without correspondence in reality.) He may display shame for his provincial origins. He may, on the other hand, with the analytic self-consciousness he has acquired, turn and re-assess his simple, easily definable past for the values it does contain. . . .

. . . What might we hope to see in a Mennonite Graduate Student who can retain his balance, winsomeness, and drive by a spirit-directed containment of the "collisions" we have named? We suggest (1) a man or woman whose simplicity would enable him to pour into the complex decisions of his

new life the full energies of his personality; (2) a man with few illusions about human nature and society, but with a confidence in the power of the Spirit to reach men outside of the Kingdom; (3) a man whose experiences of Christ have made him unafraid, if not eager for the clarification of his knowledge of human experience which can result from an acquaintance with the disciplines of university training; and (4) a man who can retain the freshness of an individual receptivity to truth, and make his personal contribution to the Christian fellowship, while recognizing the solidarity of the Christian community and his own responsibility to it, co-operative as well as prophetic.

3. . . . It would seem to me that our problems center around two major foci: To learn (1) how to effectively witness in a graduate school environment, and (2) how best to communicate with our lesser educated brethren at home. At present I feel that the second problem is the more acute. . . .

4. . . . Included in the many questions that I have been asked here . . . was this one penetrating question by a fellow student in English. . . . "Do you find this a satisfying way of life?" This was different from the run-of-the-mill question and was not exactly easy to answer.

5. . . . It is a real step forward when Mennonite graduate students begin to feel a sense of mission rather than becoming the work horses in some other church that has lost its steam or lapsing into indifference. But I fear that we are seeking a sectarian cure for a sectarian disease. Few of us realize that our faith is bound up with the psychocultural stuff of an ethnic minority. People who are able to open themselves psychologically to permit a genuine encounter with the "world" in broadly inclusive terms, go through a searching experience. Only authentic faith and resultant commitments survive. . . .

VI. TWO PROBLEMS

We are not interested in psychoanalyzing Mennonite students—or even in too much socioanalyzing. To get to central issues, I think we can say that the two main problems faced by Mennonite students on university campuses are (1) the church and (2) vocation. Their questions about the church are the most immediate.

When God's people get together in a place we have the church. Our word has a rather pious flavor, and it is often used to refer to Sunday-morning services, but our Mennonite idea of the brotherhood church involves a community of God's people in their total life together. Some Anabaptists especially stressed three things that God's people do: (1) binding and loosing, (2) discipling (witness to outside, teaching), (3) sharing (Lord's supper and what it implies for mutual aid). In one sense, then, the church is where Christians do these things together.

Now we see the problem faced by the university student. Where is his church? To what extent is this his home congregation that

he visits during vacations? To what extent is it the Presbyterian Sunday-morning service in the university town? To what extent is it the Mennonite student group that meets once a month for a social? Is he cooperating with any of these groups in doing what the church is supposed to be doing?

If there is not a Mennonite church in town, is there any reason why Mennonite students should go together to form one? Especially if there are only a dozen of them in the town. What if there are thirty? If and when this question is raised, one of the most common reactions of students is: what do we Mennonites have in common other than our ethnic backgrounds? Are there not more differences among us as Mennonites, than differences between us and other denominations? How can you have a church if there are different kinds of Mennonites around?

These are searching questions. I happen to be of the conviction that our concept of the church, which takes very seriously the relations between members, as well as the relations of these members to God, can speak very directly to the needs of many university students who are searching beyond individualism for community, and beyond meaninglessness and the multiversity for a sense of direction and a universe of discourse. Certainly our Mennonite students cannot compete with the best-trained preachers in the university centers of our country, but they can have a living fellowship that can meet the needs of students in some cases better than the Sunday-morning services in the stone cathedrals.

This is not to say that this is easy. There is a problem of the lack of time. The scholarship and fellowship money often goes to the students who do the most per year. Stretching out your program a little means that you lose badly in such a case. But there are student groups that are meeting month after month or even week after week in social get-togethers, and one can better ask how they have time for this, when their real needs that can be met only in the church are still unsatisfied. One student told me how they had come together for discussions week after week and how these discussions always grew sterile as each knew what each of the others was going to say. I would have to say that it seemed that they had decided in advance that they were not going to have time for what the Spirit was telling them to do. They were ready to discuss but not to witness. It would probably have taken less time to follow the Spirit's leading as much as they could have than to continue in sterile discussions that became more and more discouraging. If we really believe there is Good News from God for our time, it is clear that a group that really accepts its responsibilities has work to do till the whole university community has heard about this and really seen it in action—

and the group finds itself at a dead end only when it refuses to begin on the task. If the Spirit is not allowed to speak, of course, then the members of the group can listen only to the sounds of their own voices.

One can still ask whether students should not take advantage of the opportunity of hearing outstanding speakers at the university centers. There are tremendous opportunities of this kind at most universities. During my first year as a student at Princeton, I attended the University chapel on Sundays and heard the organ playing of Carl Weinrich and sermons by such men as Paul Tillich, Reinhold Niebuhr, and others. It was very exciting, but I found that there was a limit to the spiritual growth that was possible in this setting. At the end of the year, several of us graduate students decided together to go to the First Presbyterian Church and have Sunday school classes, graduate students' fellowship in the evening and other activities.

I must say one more thing on this problem concerning the church. It certainly is not all the graduate student's fault if he does not have a completely satisfactory church life. Even in our church colleges, how much experience do students get in helping plan Sunday morning worship? Maybe the nearest thing to what a student experiences in such situations is what he finds in the campus Presbyterian church—and not what he finds in a Mennonite worshipping and witnessing student community at a university center. To what extent has he really experienced the church through participation and responsibility as well as attendance before getting to university? We want all church college students to have a "normal" Sunday experience. Now actually some normal Mennonite congregations are not themselves witnessing very satisfactorily, and "normalcy" may not be the only, or even the best, way. The level of expectancy students bring with them from their previous Mennonite church experiences is not always too high.

The second problem faced by the university student is one of understanding his work in the light of his faith, a problem of vocation. Should he be in the academic work in the first place? What about the demands of this kind of work on his time? Does he have time to be a Christian at the university? Or is he a Christian just by doing his work well? The given response often given to an older Mennonite legalism, the statement that all vocations are equal, is very unsatisfactory as a guide in vocational choice. Most university students have not thought too much about this.

The academic requirements in their studies are often so great as to make it difficult for students to think about the relevance of their faith for their work. Some of them have had Christian

teachers who were incompetent in their fields, and they react by feeling that one's religion makes no difference in his academic work. To treat this properly, we would have to begin to discuss some of the academic disciplines in detail. Unfortunately, time does not permit the discussion of this in this paper.

VII. TWO APPROACHES

We could react in several ways to this discussion of the situations faced by Mennonite university students.

I would frankly say that the answer of some Mennonite church leaders has been and is defensive. Our educational philosophy has not been elaborated in detail, but it seems apparent that some of our leaders would prefer a cradle-to-grave philosophy. As much as possible, Mennonite students should be kept in Mennonite hands. Even a Mennonite graduate school would be desirable if it were possible.

I question this approach on principle. Even though it arrives gradually, I think that there is such a thing as an "age of accountability," an age beyond which surrounding young people with social pressures in the right direction should be replaced by active decision and witness on the part of the young people themselves. If they do not wish to live as Christians, pressuring them to live as though they did can do a lot of harm. If they do wish to live as Christians, they can mature only as they begin to engage in activity and witness on the basis of their faith. Certainly there should be all the preparation possible in the family and community. But this does not mean that the time of decision should be delayed. Over-protection beyond the age of decision, an age which may well be coming earlier in our culture than formerly, can prevent maturation and healthy spiritual growth. It leads to stunted Christians.

Naturally the increase in opportunities for decisions may mean some people will decide wrongly. That is exactly what some denominations have been telling the Mennonites and other free churches for centuries. It is risky business—or a matter of real faith, to use other terms. But there are times when a church, too, has to be willing to lose its life if it would save it. Moreover, if we need historical evidence and support for a free-church aggressive approach, there is probably more now than there has ever been.

If we view the question aggressively, we will emphasize the tremendous opportunities for Christian growth on a university campus. Many university students testify to an experience of exactly this kind. The opportunities for witness among non-Christian university students are so great that some of our missionaries in foreign and domestic fields have attended and are

attending universities part time partly in order to get acquainted with young people who are open to new ways of thinking and to the challenge of the Gospel. Recently I attended a student group that shortly before had accepted as a member a girl of non-Mennonite and non-Christian background who had become a Christian. This was an exciting event. It had affected the character of the group. It was a miracle, to be sure, but it is for exactly such miracles that Christians exist in the world. When such miracles occur, students realize afresh that their university work is not a parenthesis between real-life activities. They are not in school just in order to be able to do research or teach in a Christian college afterward. They have unique opportunities that teachers in Christian colleges and in research in many places may not have, and they do well to take advantage of these while they have the chance.

They need the full support of the church in this. They need the understanding of the church at home, and the full support of a reference group on campus, a group to which they can invite friends and university acquaintances. Perhaps we can best serve our university students as we challenge them to represent us faithfully in meeting these unique opportunities, and in leading us to a new vision of our work as a church in the world.

THE RELATION OF RESEARCH TO THE SECTARIAN SELF-IMAGE

By Calvin Redekop

Introduction

At first thought there may not seem to be much justification for a topic such as this. However, if the assumptions and conceptualizations proposed are considered valid, then it will be fairly clear that sectarianism and research are in tension.

The plan of this paper is to construct a typology for sectarianism and for scientific research. Then the areas in which there is disagreement or contradiction will be lifted out. These contradictions will be applied to two important areas of tension and conflict in the Mennonite church at present. The central thesis of this paper is: scientific research and the sectarian self image are mutually incompatible. Either, if it is to survive, must destroy the other.

Insofar as the Mennonite church approximates the typology proposed for sectarianism, it will find itself facing the dilemmas that will be outlined in this paper. The writer is not taking a position on sectarianism in this paper. Whether the Mennonite church should abandon the sectarian image is not open for discussion here. Rather this is an attempt to analytically describe what the situation appears to be.

Another methodological difficulty needs to be mentioned. The sectarian and research typologies proposed here are an attempt to deal scientifically with a problem. No one has ever nor will ever see the sect or research as proposed here. Nevertheless, in terms of scientific thinking, typological thinking is absolutely necessary.¹ A typology is an interrelationship of certain concepts which seem to be logically and empirically interdependent. The classic definition of the sect is just such a typology. No one has ever seen a sect as described in the classic typology. The term "sect" as used in this paper is the result of an attempt to understand a specific type of religious experience. The starting point

¹Competition, for example, is a constructed type, which does not exist in pure form. For additional bibliography on the constructed type, see John T. Doby, *et. al.*, *An Introduction to Social Research* (Harrisburg, Pa.: Stackpole Press, 1954).

in the typological construction is to agree that a certain entity is what we are trying to describe.

I. Definition of the Sect

A. The Sect Type as a Frame of Mind

There is no satisfactory characterization of sectarianism that focuses on social organization or cultural forms. There is too much variation in social organization and practice to allow for a characterization that is applicable to all those groupings that are termed sects by the classical definition. It appears to me that the most consistent procedure for understanding sectarianism is to conceive of it as a frame of mind. This frame of mind can exist anywhere, and thus there can be sectarian groups in any type of social grouping, such as the political, artistic, or recreational. The *religious* type of sect is characterized by certain religious symbol systems and the reality they represent. There are several things that can be said about the sectarian frame of mind.

The first and foremost is that the sectarian frame of mind accepts an *a priori* approach to the truth. Ideas precede action. Thoughts come before behavior. The sectarian mind is a rational mind. An event follows a cause. The world is composed of causes and effects. Truth is achieved not by human effort, but is revealed. It is accepted as pre-existent. For the *religious* sectarian, ultimate meaning and truth are couched in God. God is inscrutable, and not knowable, yet he gives us meaning and truth.

God was not another name for the evolutionary process, or for the sum total of the laws of nature, or for a compendium of all noble things . . . he was the ruler of the universe, an omnipotent, magical King, who felt, who thought, who remembered and issued his commands. And because there was such a God, whose plan was *clearly revealed in all its essentials*, human life had a *definite meaning, morality had a certain foundation*, men felt themselves to be living within the framework of a universe which they called divine because it corresponded with their deepest desires. (Lippmann, p. 117)²

The second trait of the sectarian frame of mind is that it is a categorical mind. Nothing remains unordered in the sectarian mind. Everything has its logical and functional place. This ordering is of a special type. It is a black and white order. Things are either good or bad. Events are either salubrious or deleterious. A sectarian mind feels uncomfortable with unfinished business, with loose ends, with things that do not fit into a category. The sectarian mind does not relish tension. Matters must be settled once and for all. Anxiety is undesirable.

²Italics mine.

The state of anxiety, the feeling of powerlessness and insignificance and especially the doubt concerning one's future after death, represent a state of mind which is practically unbearable for anybody. Almost no one stricken with this fear would be able to relax, enjoy life, and be indifferent as to what happened afterwards. (Fromm, p. 396 in Yinger)

In the passage just quoted, Fromm refers to the Lutheran and Calvinist reformations as an attempt to allay the anxiety, and insofar as this was so, represented sectarian needs.

A third trait or dimension of the sectarian frame of mind is the closed thought system. Because of the factors mentioned above, change is terribly threatening to the sectarian mind. There is no point in reopening old issues, or re-examining issues that have been decided earlier. This only creates anxiety and distrust about the validity of the earlier decision. Similarly the acceptance of new ideas or foreign elements into the thought patterns of the sectarian mind are equally disturbing and anxiety creating. A strange or new idea may upset the equilibrium and demand a re-adjustment which can not be made without some eternal verities. There is no progress to be made by looking elsewhere for truth or insight. The real issue is retaining the revelation and insight that has been gained. The frame of reference relative to experience in time is that the history of experience is one of a degenerating universe. Things can not get better. They can however get worse if the line of defense is not maintained.

The sectarian self image can therefore be characterized in conclusion as a group of people looking backward. The purpose of existence is to preserve what has already been revealed as ultimate meaning and purpose. The important activity is trying to apply the ultimate truth and meaning to the mundane task of living. History is seen as decline. Man can not hope to change. He can only hope to retain and/or preserve.

B. The Sectarian Frame of Mind and Its Life

The sect is a strictly means-end of social grouping. Since it believes that cognition comes before action, its behavior conforms strictly to its beliefs. The sect type does not look to experience or experiment for the validations of its beliefs. It attempts to make beliefs applicable to daily life. Several themes will tend to predominate the social behavior of the sect.

One of the themes is separation from the "world." The world means for the sectarian that aspect of experience which will contaminate or hinder the achievement of the goals that the sect aspires to achieve. Since there is nothing new to be gained, there is no point in meddling with people and behavior which can only contribute to being less faithful.

Another theme is standardization of behavior. Human nature is such that it wants to express itself. Much of a sect's energy

will be spent in keeping behavior within a limit that will not disrupt the beliefs and values of the sect, as illustrated in the Old Colony:³

They used to have "kroagah" (inviters) who would invite the transgressors to the "donnerstag" for an accounting of their evil deeds. If they did not appear on that date, they had to appear before the whole church. If they did not come to this, they were excommunicated. (p. 78)

Another basic theme is education or indoctrination. The school system and many of the other institutions in the Old Colony, as in many sects, are very carefully scrutinized and ordered so that no extraneous influence will enter to contaminate and disrupt. An Old Colony member in Manitoba (the more progressive segment of the Old Colony) had the following to say about education:

I myself am not afraid of schools, though they have their dangerous elements. The further away from home, the greater the influence on the student. Often the young people come back with shorn hair, and other evidences of beginning to adopt worldly practices. If they come back and have not lost their loyalty, education is fine. (p. 63)

It should be mentioned here that the schools referred to in the quote were other Mennonite denominational schools such as the academy at Gretna, Manitoba. Many other things could be said about the sectarian frame of mind, and the behavior which results from it, but this hopefully will be enough to accomplish the work at hand.

II. The Nature of Research

There are several types of research. There is the familiar division of research into pure and applied. There is also the research as related to documentation of the past, which is termed historical research.

A. Pure Research

Pure research is closely related to science and the scientific mind. Pure research probably does not exist, but approximations of it do. As in the above section, the mind of the scientist or researcher will be used in our definition of research.

(1) The first trait of research is that it is based on an expectation of the breaking in of the new in experience.

The great triumphs and startling novelties of science and technology have come from the *opening up*, by means of new

³The quotations presented concerning the Old Colony Mennonites are transcriptions of conversations which the author obtained while doing research under a grant entitled "Anglo-Latino Relations in Hospitals and Communities" sponsored by the United States Public Health Service and the Carnegie Corporation and administered through Michigan State University by Charles P. Loomis. This assistance is gratefully acknowledged.

technical devices in conjunction with theory, of *new* realms of experience; of things and processes hitherto out of sight and unguessed. (Ritchie, pp. 97-98)⁴

Ritchie uses as an example of the truly scientific and at the same time religious mind the work of Pasteur.

The work of Pasteur consisted essentially in opening up one of these *new* realms of experience, the world of pathogenic micro-organisms. His work, with that of Koch, produced a new science with a *new technique*, bacteriology. (Ritchie, p. 99)⁵

(2) The second trait of research is the tentativeness of its results. Most of the philosophers and thinkers who have tried to harmonize religion and science harp on this point. Science does not promulgate truths, it reports what it finds. But what it finds today may be overthrown tomorrow. This tentativeness is admirably stated in an account cited by Lippmann:

I have dealt mainly with two salient points—the problem of the source of a star's energy, and the change of mass which must occur if there is any evolution of faint stars from bright stars. I have shown how these *appear* to meet in the *hypotheses* of the annihilation of matter. I *do not hold this as a secure conclusion*. I *hesitate* even to *advocate it as probable*, because there are many details which seem to me to throw *considerable doubt* on it, and I have formed a strong impression that there must be *some essential point* which has *not yet been grasped*. I *simply tell* it to you as the *clue* which at the moment we are *trying* to follow up—*not knowing* whether it is false scent or true. I should have liked to have closed these lectures by leading up to some great climax. But perhaps it is more in accordance with the true conditions of scientific progress that they should *fizzle out* with a glimpse of the *obscurity* which marks the frontiers of present knowledge. I do not apologize for the *lameness* of the conclusion, for it is not a conclusion. I wish I could feel confident that it is even a beginning. (pp. 125-26)

Scientific research therefore hardly claims to discover the truth, for by truth science understands something quite different than is understood by that term in religious circles. (Lippmann, p. 127)

(3) A third trait of scientific research is that it is concerned with explaining what is, and why it is, never with what ought to be. Scientific research assumes a relative position on all of its findings and presuppositions. "The same facts seen from some other point and with some other purpose in mind could be explained quite differently. . . . It is not a picture of the world, as God would see it, and as all men must see it, but that it is simply one among many possible creations of mind into which most of the data of experience can be fitted." (Lippmann, p. 131)

³Italics mine.

⁴Italics mine.

B. Applied Research

This type of research is what most of us are familiar with in America. Applied research is conducted by all the big companies who hope to be able to apply scientific principles in new ways so as to "maximize" their profits, as the economic experts say.

It must be ruefully admitted that we have not produced our share of great new germinative ideas in recent years. In atomic research, for example, most of the fundamental theoretical progress was made either by European scientists or men who had received their training abroad. We are strong in application, in development and engineering, but much less so in the fundamental contributions of the theory on which all these are based. (Flesch, p. 24)

Flesch goes on to say "our research relies far more on accumulating than on guessing. General Electric with its training courses in 'Creative Engineering' is the exception; the American Cancer Society, which is openly resigned to 'whittling away at this mass of mystery' is typical of the general rule." (Flesch, p. 24)

Applied research is really tinkering. It comes as somewhat of a shock to learn that Edison is considered a tinkerer, and not a scientist. "Edison, as one of them [scientist] said, was not a scientist and was not ever interested in science." (Flesch, p. 24) It is proposed by some scientific thinkers that the modern world differs from the ancient world as far as scientific ideas is concerned, only in the difference in the gap between the development of an idea or theory and its application. (Coulson) That is to say, applied research is close on the heels of pure research, and is in fact often goading pure research, as is evidenced by the Manhattan project. Pure science is furthered by hunch or accident, while applied research is the dogged attempt to make the ideas work. (Flesch, p. 24)

C. Historical Research

There is real question as to whether historical research is scientific or aesthetic. One must conclude that it can be both and likely often is. Historical research is scientific insofar as it uses as many of the creeds and rituals of science as possible. This would include the avoidance of personal bias, the willingness for the facts to speak for themselves, even to the overthrowing of a theory, etc. Insofar as research in past events is conducted to prove something, or to build a grand theory or explanation, historical research is not a science, but an art.

Our final interpretation of history is the most sovereign decision we can take, and it is clear that every one of us, as standing alone in the universe, has to take it for himself. It is our decision about religion, about our total attitude to things, and about the *way we will appropriate life*. (Butterfield, 1949, p. 25)⁶

⁶Italics mine.

It is Butterfield's contention, that though one may use scientific tools and methods, the final use of history is for each of us to develop a philosophy of human life in time.

III. Research and the Sectarian Self Image

If it were possible to keep clearly in mind the characteristics of the sect type groups and of research there would be no need of the third section of this paper. This section will simply spell out why some research is inimical to the sectarian image. I will begin by comparing the type of research least incompatible with the sectarian image, namely, historical research.

Historical research, especially of the aesthetic variety, is most congenial to the sectarian image. The aesthetic research type is most amenable to the sectarian image because the sectarian mind need utilize only that which suits his wishes. He is not aware and concerned about the fact that he may be violating what actually was. He is most interested in proving or marshalling evidence for his faith, and for the revelation of God.

Historical research of the scientific variety is more threatening to the sectarian image, especially if the sectarian himself is doing the researching. Then he can not slough off the results as being "unregenerate" thinking. He needs to reconcile what he finds with what he believes. Often the sectarian researcher is forced to take a morally duplicitous position. A friend at a theological school suggests that the sectarian image that has emerged for Mennonites by their own research is highly biased. Mennonite research has been conducted with a jaundiced eye in its own favor, he contends. For example, he produces evidence that the first Anabaptists in Switzerland were not as honest and trustworthy as we hope they were.

Applied research, or technological research, is not incompatible with the sectarian image, if the right premises are used to begin with. For example, if it could be assumed that psychological pressures were acceptable to the experiencing of belief, the sectarian might conduct research on how to best apply psychological principles to revivals and church worship. The difficulty with applied research is that there is for the sectarian always the temptation to apply or try to apply theories that come from the scientific world, and not the truths that emanate from God's word.

Pure research of course is outside the realm of the sectarian mind. The object of pure research is to discover something new, to disprove something, to understand something not understood before. The sectarian self image starts with an *a priori* frame of reference. There are no new or hidden dimensions of reality. There is no need for proof for the beliefs or tenets that have been revealed by God. When the sectarian mind feels the need

to experiment with experience, when he begins to doubt the things considered beyond doubt, he is no longer a sectarian. Then he moves into the world of the ambiguous. He enters the world of anxiety, where he is sure of nothing and must make everything tentative. He can then no longer say, black is black and white is white, for there are qualifying conditions to make many things seem gray.

Every human being moves continually between the sectarian position and that of the scientific researcher. But some people tend to gravitate more consistently to the sectarian pole than to the scientific. The temptation to become sectarian or scientific faces everyone. One finds evidences of the tension between the sectarian and scientific mind in the New Testament. Most of us are familiar with the story of how Jesus healed the son of an official at Capernaum.

"You can go home," returned Jesus, "your son is alive and well."

And the man believed what Jesus had said to him and went on his way.

On the journey back his servants met him with the report: "Your son is alive and well." So he asked them at what time he had begun to recover, and they replied: "The fever left him yesterday at one o'clock in the afternoon." Then the father knew that this must have happened at the very moment when Jesus said to him, "Your son is alive and well." (John 4:50-53, Phillips)

The point I want to emphasize in this event is not the problem of faith, for the man believed his son was healed. The point was that the officer felt better with supporting evidence from his senses and the empirical world.

When the sectarian religious group engages in scientific research, the following things, among others, will happen: (1) The sect is indicating a willingness to let human experience participate in mapping out the belief system. (It will be protested that the sect in fact is very much prone to make its experience determine the belief system. This is certainly true, but the sect tries as much as possible to suppress this fact. Research is an open admission that extraneous factors are being admitted.) (2) The sect is admitting that the *a priori* beliefs are no longer sufficient to handle the problems of the day. This is especially devastating to the sectarian image, for how can it admit that what was decided or held to be true, say, fifty years ago, is now suddenly no longer valid? (3) Receptivity to the new and the contingent is directly inimical to the very essence of the sectarian mind, as indicated earlier. (4) Research is based on discovery and on some sort of progress. The sectarian mind says there can be no progress, because the principles of life have already been established. Herbert Butterfield says western society began to become secularized and

scientific as "there began to emerge a different picture of the process of things in time, a picture of history as the embodiment of progress rather than of decline." (Butterfield, 1960, p. 7) When the sectarian engages in open-ended research, he is denying the image of sectarianism, for progress is not possible in the sectarian view.

IV. Application

It is highly likely that the arguments presented here may appear irrelevant. On the other hand, they may be very relevant. It would seem to me to be a fact that the Mennonite church adheres to some extent to the sectarian model I have presented. For example, I believe Mennonites feel that beliefs determine behavior. Insofar as the Mennonite church adheres to the sectarian ideal, and engages in scientific research, it is caught in a dilemma. I will illustrate this dilemma in two areas, though many others could be listed.

A. Schools

The Mennonite church believes in education and schools. It is said that the future of the church is in her schools. It surely is British understatement to suggest that our schools exist purely for the sake of indoctrinating our youth in the *established beliefs and practices*. As soon however, as our teachers begin to let their imaginations run free, and begin to speculate, they are beginning to engage in scientific research. This is a dilemma all of us know by intimate and bitter experience. A former student of mine recently said that he could respect the teachers of one Mennonite college more than those of one of the others he attended, because in the former he felt the teachers were honest, and willing to follow the truth in whatever direction it led them. It would seem that the more sectarian the world view and beliefs of a church group are, the less it could sponsor education of an *academic* type. The Old Colony bears this out very well. Most sectarian type groups are very careful of the educational process. No sectarian school hires agnostics and atheists. No Mennonite school hires a true liberal, and if it does, the teacher lives in two worlds. And if there are only sectarians in the school, it is not really academic.

B. Mental Health

The sectarian believes that the Bible and God's truth are sufficient to solve all problems of human existence. The Mennonite church is an adherent to this view, as witness, for example, the many references to the belief that "Christ is the answer to all men's needs." The church papers resound with this creed. The mental health movement headed by the psychotherapeutic profession on the other hand, believes that mental health can be

achieved by finding some of the answers to men's needs in the scientific search for explanation. It does not accept the doctrine that a transcendent power determines the nature of health or sickness. When the sectarian group turns to psychotherapy for help in solving its mental health problems, it is admitting that the sectarian *Weltanschauung* does not have the correct view, or the resources to solve this question. Then the sectarian view is cracking at the seams and we must conclude that the sectarian frame of mind is falling apart. When the sectarian turns to the secular scientist-researcher for help in solving man's socio-religious problems, he is succumbing to belief in secular or scientific truth, not religious truth. It may be retorted that both sectarianism and science may be working at the same thing and coming to the same truth, but this is not necessarily so.

If the method of science has the last word, then revelation is reduced from a means of arriving at absolute certainty to a flash of insight which can be trusted if and when it is verified by science. Under such terms of peace, the religious experiences of mankind become merely one of the instruments of knowledge, like the microscope and the binomial theorem, usable now and then, but subject to correction, and provisional. They no longer yield complete, ultimate, invincible truths. They yield hypotheses. But the religious life of most men has not, until this day at least, been founded upon hypotheses, which, when accurately stated, included a coefficient of probable error . . . [science] does not yield a certain picture of anything, which can be taken naively as a representation of reality. (Lippmann, p. 130)

The sectarian, on the other hand, is in search of absolute certainty. He hopes to achieve this by finalizing and categorizing human experience in a static way. The sectarian who goes to the university to get an education likely will not come back. If he comes back, he will be here bodily, but he will be marching to the tune of a distant drummer. If the sectarian obtains psychotherapeutic help, chances are he will not believe that there is nothing new to be learned in the world.

Conclusion

A number of conclusions can be drawn if the conceptualization for sectarianism and research presented above can be accepted. (1) Insofar as sectarian type religious groups are turning toward research for help, they are relinquishing the sectarian position. (2) Insofar as a sectarian group is making the transition, the tension in relinquishing one frame of mind for another should be fairly obvious. (3) Whether the sect should adopt the open-ended world view is not possibly decided by scientific reasoning, but rather by theological reasoning. (4) In the writer's opinion a religious group will need to retain a certain amount of sectarian

thinking. For example, sin as a cause of certain human behavior is an *a priori* which science will not be able (nor want) to explain, and insofar as a Christian holds this view, he tends to be sectarian, in that particular area. (5) It does not seem possible for a Christian to be an absolute sectarian, nor can he relinquish all sectarian characteristics. The Anabaptist-Mennonite tendency toward conceiving truth as absolute but revealed in a concrete situation (disciplined fellowship) would seem to me to be an alternative worth exploring.

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IMPLICATIONS OF SCIENTIFIC RESEARCH FOR MENNONITE FAITH AND CULTURE

*By Erwin N. Hiebert**

Any person with genuine scientific interests, who thinks at all seriously about religion, will probably discover sooner or later that he can pose many more questions, touching upon science and religion, than can be readily answered.

Some persons will manage to avoid thinking about such questions altogether—by placing science and religion in logic-tight compartments. Science, they will say, deals with the material, substantial world, while religion deals with man's spiritual existence. To seriously carry through a rigidly conceived double-compartment view of the world one would have to establish two mutually exclusive classes of questions and answers—each having its own unique linguistic and methodological apparatus. The boundaries of their concerns would not overlap.

It is easy to take up extreme positions, i.e., on the one hand to accept everything uncritically in matters of faith and to say that scientific inquiry can have no basic effect on religion. It is also easy to reject matters of faith entirely by saying that only scientific methods of inquiry can give us the truth. These two positions seemingly so far apart have at least this in common: they are both ways of avoiding thinking. If so, what I think we shall have to insist on in the long run, at least as an ideal, is a full-scale confrontation and a markedly frank exchange of ideas between those who defend the ramparts of theology and the Christian faith and those who are most familiar with the advancing frontiers of science. The confrontation would be materially advanced if more individuals approximated strong backgrounds in both science and theology.

Anyone who has studied the developments of science with an eye to the effects of changing scientific conceptions on man's religious beliefs knows that there are inherent difficulties involved in trying to maintain this material-spiritual, or science-religion dichotomy. What has happened frequently is that the methods of scientific investigation employed with great success in dealing with the external, visible world, have been found later to be emi-

*Assoc. Prof., History of Science, University of Wisconsin

nently suitable for dealing with problems which were once thought to relate exclusively to man's inner personality. In the end science has claimed for itself a major segment of the spiritual or religious compartment ostensibly so remote from notions of atoms, genes, space and time. At its worst the church has experienced a continuous retreat while science has taken over area after area of concern formerly thought to be the prerogative of the church and of the life of the spirit. This expansion of science at the expense of religion seems to be rather inevitable, or so it would seem, to anyone who looks at the world through the mutually exclusive categories of matter and spirit.

According to another viewpoint which is, so to speak, at the other end of the stick, we encounter persons, who, if they do not outright reject the value of man's religious interests, will argue that nothing except that which has withstood the test of the scientific method is worthy of being called truth, whether that be in the area of religion, or anywhere else. This is sometimes called scientism. It springs from an over-optimistic evaluation of the extent to which man is able to obtain intimate understanding of his environment by making use of the ordinary tools in trade of science. Perhaps there is really something of a paradox here. We tend to believe, for example, that while we understand the nature of an ordinary table, the nature of human personality is much more mysterious. As a matter of fact it could be argued that we often know much less about the construction of a table than we do about the intimate nature of each other's personalities.

Any modern physical description of a table, or any other part of the physical universe, must necessarily be symbolic and therefore partly inadequate. Unless scientific symbols such as space, time and light are arranged so as to form concrete ideas for us, they are just as abstract as the individual letters of the alphabet. Furthermore, the word images and statements which we create in order to bring the scientific symbols as close as possible to observed phenomena are never satisfactory without "explanations" which lean very heavily upon ways of looking at the table which seem to be more suited to the kind of thing we grasp when we talk about understanding each other's personalities. In any case, if there are such hurdles in the way of trying to explain elementary physical phenomena in purely scientific or engineering terms, how much more taxing it would be to load "scientific method" with the task of explaining everything that is.

I would say that both of the above extreme ways of looking at problems touching upon science and religion are not of much value to the believing and practicing Christian. They are certainly not easily brought into focus with the main historical interpretations of the Scriptures. We must, of course, recognize that

dogmatic theology has traditionally been deeply involved in some aspects of the world's existence which are now very closely related to the concerns of scientists. I am referring to problems which deal with the material origin and destiny of man, the world and the rest of God's creation. These problems, we know, have been dealt with theologically and scientifically, as well as within a more metaphysical framework. In the latter the emphasis has been upon subtle intellectual exercises devoted to exhausting the logical possibilities of certain scientifically plausible suggestions. They are interesting, though hardly *bona fide* theology or science. Compartmentalization is not the answer. Scientism is inadequate.

For almost two thousand years, people who have called themselves Christians, have been fairly explicit in laying down a system of basic principles or tenets fundamental to the Christian faith—sometimes as a creed, sometimes as a policy. Christians have maintained, though by no means always in agreement with one another as to subject matter, that there are some articles of faith which derive their authority solely from the Bible or the church; that the kind of criticism which characterizes the natural philosopher's or the scientist's activity in studying the behavior of the world is not at all applicable to matters of religious faith.

I personally fail to see how the Christian religion can dispense with an underlying theology without becoming merely an ethical or humanitarian movement. If God has truly revealed Himself through Christ, then the claims of the Christian religion can hardly be less than absolute. For here is One who spoke with authority and not as the scribes. The claims of His divine revelation become absolute or they are nothing at all. Surely the conception of Christianity has been associated also with various supernatural or extra-natural phenomena. It has even been characterized by dispensational progression toward some final catastrophic culmination which seems to be at odds with the evolutionary progress inherent in nature. To some extent then the Christian religion can be classified as an other-worldly religion.

Christianity is also however a this-worldly religion. One is tempted in fact to say that all the world provides the witness of a message from God to man. Christianity in this world-affirming role looks for the truth wherever it is to be found by accepting God's work of creation as good and then searching, cost what it may, the secret of life for man hidden therein. Christianity is unique as a religion in that its various interpretations and expressions include elements of both a this-worldly and an other-worldly religion. The simple truth of the Gospel is that you can't have one without the other. I suggest that we could gather considerable evidence from Jesus' teaching which would show that He believed that a knowledge of natural law with respect to the things

of this world provided a sound basis for the understanding of His eternal message. The least we can say is that the two run parallel.

Apart from these more purely theology-oriented concerns, I should mention, in second place, another aspect of our faith which originates within the depths of man's personal experiences with and commitments to a Being outside of himself. The encounter between man and God, which characterizes this dimension of religious faith, transcends anything which we can legitimately talk about or perhaps even think about rationally in analytical and scientific terms. Nevertheless, here again we would do well to remind ourselves that modern scientists have taken it upon themselves to study the nature of men's religious experiences as part of the broader study of human behavior. Is there any *a priori* reason why they should not do so?

I am not going to explore here any further these questions of religious faith as related to either dogmatic theology or to religious experience, but will jump straightway to the basic assumption which underlies everything else which I have to say. It is this: that whatever comprises the basic essentials of our religious faith at any time, we must be open enough and uncommitted enough about our world view to be able to adapt our faith to the whims and fancies of history. Crucial as it may be to hold fast to a system of dogmatic theological tenets and to place the message of man's personal experience of God in Christ at the heart of religious faith, I should want the Christian above all to remain alive and alert to the world's changing patterns. I hope that what I am advocating in terms of total involvement of the Christian in the world will somehow fit into the Mennonite conception of "being in the world but not of the world."

What I am trying to say is that our religious faith has been and will continue to be inextricably bound up with the changing dynamics of history. This includes man's political and socio-economic development, but more particularly his technological and intellectual accomplishments in philosophy, science and the arts. It is the history of scientific accomplishments as related to Christian faith which are of prime concern to us here now. I suggest that we will have much to gain in perspective by paying some attention to the historical development of our subject rather than by concentrating exclusively, as has been done so often in the past, upon the dogmatic and experiential facets of our religious faith.

The shooting war between science and theology is no longer widely pursued as an exciting game. There is much more emphasis nowadays upon the need for the establishment of genuinely friendly relations between science and religion. Still this relation, to be meaningful, must be more than the mere withdrawal of both

parties into a state of tolerant neutrality. Probably one of the most serious obstacles to a real rapprochement between science and theology lies in the difficulty of establishing a genuine understanding of the problems in both disciplines. Mere good will is not enough. Perhaps even frank discussions are not enough. To be a good theologian one must needs be in the thick of involvements with worthwhile theological problems. To be a good scientist is virtually impossible without firsthand experience with the business of science itself. Experience with science and religion in operation will necessarily provide insights which no amount of talk can give. Only then one begins to get a feel for asking the right kinds of questions.

Let us go on from here to explore what openness and uncommittedness implies for the Christian in his attitude toward the potential outcome of scientific research. We know that the Christian religion holds the status among various more or less sophisticated nations and cultures, including our own to some extent, of being only one of many competing systems of thought and ways of life. The Christian faith has invariably been appraised by outsiders on two kinds of evidence: on the basis of how nominal Christians behave in various historical circumstances, and on the basis of verbal and written statements which purport to explain what Christian faith means and implies. As to the former, we know all too well that the behavior of Christians and so-called Christian nations are being carefully scrutinized today wherever competing ideological systems vie for the allegiance of uncommitted peoples. As to the latter, the defense of the meaning of religion I suggest that it is an incredibly ambitious assignment to try to supply, in a convincing way, a comprehensive rationale for the Christian faith. It is especially difficult at those highest levels of intellectual communication which cuts squarely across the face of scientific thought during times of the most unprecedented scientific progress in history.

I am convinced, in first place, that we will not be able successfully to face the problems where science and religion meet without a truly consistent and non-contradictory use of theological terms. I am also convinced that this will demand the facile manipulation of the canons of logic and many of the kinds of arguments and appeals which have characterized man's scientific thinking. This is a plea for the use of analytical methods in the examination of both theological and scientific problems.

For scholars who study the interactions between the various stages of development of science and their contemporary cultures there is an almost inexhaustible supply of materials upon which to draw—from the time of the earliest written records to the present. Men's changing religious conceptions play a major role

in such studies throughout history, but, of course, they become ever more complex as we move up into modern times. To attempt, therefore, to make a statement of the potential implications for our religious faith, of present day scientific research, would not only be far too ambitious it would be presumptuous. Nevertheless, the situation is not entirely hopeless, and it may well be that historical studies of the concomitant development of science and religion in the past, will help us to locate some of the most important landmarks and trends in the direction of which we are now moving. I hope most of all, that you will agree with me that such a study can help us in the future by sharpening our ability to judge the probable consequences of present trends in scientific research.

It has been said that nothing gives a man so much insight and judgment about the future as the study of history. If there is any germ of truth to this statement for ordinary history, there is probably more truth to it for the history of science. Indeed, the history of science is rather unique in this sense, in being the study of the only area of man's entire intellectual activity in which there is unambiguous progress. I use the word "progress" cautiously here, meaning thereby only to stress the utter dependence of the development of some kinds of knowledge upon the accumulation and hierarchical structuring of other kinds of knowledge. To put it bluntly I mean by scientific progress the development of ideas and techniques which permit us to solve problems and do things which would otherwise be impossible. This involves the understanding, control and manipulation of nature.

Progress at any one time, in philosophy, literature, painting or music, for example, is not so utterly dependent upon what has gone before as it is for science. If there is any doubt in your mind about this comparison try to imagine the kind of conversation which would result if you were able to have Bach and Stravinsky discuss the merits of their musical accomplishments. It is not a foregone conclusion that Bach would consider Stravinsky's music to represent great progress beyond that of his own compositions. Nor should we expect to find universal agreement in literature in a discussion between Homer, Shakespeare and Henry Miller; nor in philosophy between Plato, Kant and John Dewey. On the other hand a comparable imaginary conversation between Sir Isaac Newton and Albert Einstein on the respective merits of the classical theory of gravitation and the theory of relativity would quickly result, we can be sure, in Newton's admission that tremendous progress had been made in this subject since the publication of his *Mathematical Principles of Natural Philosophy* in 1687. Let me be more explicit about the meaning of progress in this context by saying that the theory of relativity, which is built

cumulatively upon many centuries of scientific information as well as upon numerous more and more successful physical theories, does do a much better and more comprehensive job of explaining and predicting physical events than did the theory of Newton. This changeover from the Newtonian conception to that of relativity required a major readjustment in men's mode of scientific thinking. It also left society altered in the process.

It can be demonstrated historically that some of the major readjustments in man's religious beliefs have followed closely upon the heels of man's most radically significant changing conceptions of the nature of the physical world. These interactions between science and society stand out most boldly during times of greatest scientific progress. The fact that there have been such major changes in scientific outlook is fully consistent with the idea that man possesses the peculiar nature, which animals do not, of being moderately dissatisfied with the *status quo* at any particular time. This leads man to the desire to understand and manipulate his surroundings in order to improve both his physical and intellectual environment. It is only, however, by acquiring intimate knowledge about the world of nature, physical and biological, including knowledge about himself as an object of investigation, that man is able to do so. He can then in some sense predict the future and eventually control and manipulate his environment to suit his needs and desires.

Historians have had no difficulty locating evidence for major scientific upheavals in the records of the past. The records may be archeological or written, and they may require considerable skill to interpret intelligently, but there can be no doubt that man's accomplishments on the level of scientific thought and activity have never remained static. Examined in retrospect, some of the changes in the reorientation of scientific thought appear to be significant enough to warrant being called "scientific revolutions." I am referring to those wholesale intellectual rebellions to previously accepted notions which have brought about some entirely novel way of looking at the world; violent upheavals which required the overthrow of obsolete, useless, cumbersome or inadequate scientific concepts.

The specific historical example of a major scientific revolution which I want to discuss with you here deals with changing patterns in the search for an adequate conceptual framework for the description of the motion of the heavenly bodies. The sixteenth and seventeenth century revolution in astronomy which I have in mind is symbolized by no mere stand-by observation. It thrived on the ingenious use of Euclidean geometry and the execution of deliberately planned experiments designed to put nature to torture until she revealed her secrets.

Our case history begins in 1543 with Copernicus' treatise *On the Revolutions of the Heavenly Spheres*, a work which proposed a sun-centered or heliocentric theory of the world in place of the then-accepted geocentric system of Ptolemy. According to the latter the earth stood motionless at the center of the world system while the sun, moon, stars and planets were carried around the earth.

By the beginning of the seventeenth century, while Galileo was propagandizing in favor of the Copernican heliocentric theory, the Roman church branded the new views heretical and contrary not only to the whole Aristotelian cosmology but to the holy Scriptures. Galileo in effect warned the theologians that it was foolhardy for them to lay themselves open to criticism by attempting a dogmatic defense of matters for which only science ultimately could provide a solution. With unshamefaced confidence he told his religious superiors that the intent of the Scriptures was to teach men how to go to heaven, and not how the heavens go. His boldness was not appreciated.

At the age of seventy, Galileo, clad in the white shirt of penitence, knelt before his assembled judges in the large hall of the Dominican monastery of Santa Maria in Rome. Touching with his hands the holy Gospels, he was induced to swear that with sincere heart and unfeigned faith, he abjured, cursed and detested the heliocentric theory and that he would never verbally or in writing defend it again. Such strong feelings against the new scientific theory were not confined to the Catholic fathers. Neither Luther nor the other Protestant reformers felt that the heliocentric theory had any chance of being correct on the basis of evidence in the Bible. Eventually the amassed scientific evidence for the heliocentric theory became so overpowering that even the Church slowly changed its beliefs on this matter. In the meantime, a part of the foundation upon which men had erected their religion was found to be mere illusion which could no longer withstand the erosive effect of astronomical investigations.

After Galileo's death, Sir Isaac Newton was able to show that the principles of terrestrial mechanics which had been formulated to describe the behavior of falling weights, swinging pendula, and projectile motion could be extended, with the aid of the motion of gravitation, to provide a system of dynamics for the movement of the heavenly bodies. The accomplishments of Newtonian physics cannot be denied. From the standpoint of other scientific ventures no other pursuit had been so fruitful in extending man's advantageous control over the forces of nature. Newton and his followers were able to show that the then known universe operated in accordance with a mechanistic, even deterministic, physical

model describable in mathematical terms. Physics had all but quantified the universe.

Newton himself seems not to have been completely at ease in advocating a completely self-regulating clocklike world. His view on the subject is admirably represented in a famous debate between the Reverend Samuel Clarke, defender of Newton's position, and the famous German philosopher-mathematician Leibniz, who took up the more mechanistic side of the argument.

It was Clarke's intent to show that God himself did after all have a hand in the daily operation of the universe. While Clarke felt that God had created a world operating according to natural laws—like those of gravitation and inertia which Newton had discovered—he still wanted to insist that God was not therefore completely superfluous in the daily physical operation of the world. That is, Clarke was reluctant to look upon the universe as a completely self-regulating clock-like mechanism operating without any action on the part of God. It was suggested that from time to time God had to wind up the clock or readjust and check the motions of His celestial machine as a clockmaker would do even if he had designed a clock with the greatest perfection.

Leibniz on the other hand felt that Clarke's God, who was periodically pressed to adjust His handiwork to bring the celestial objects back into line, would be a God who was somewhat short of divine perfection. According to Leibniz, the infinite wisdom and foresight of God were responsible for the creation of a world operating with such perfection that it never required any adjustment after the moment of creation. The world was constructed so perfect as a machine, said Leibniz, that God had not had to turn His hand to the business since its creation. God was therefore, as far as the physical operation of the universe was concerned, to be looked upon as an all-wise absentee Landlord who could step aside and admire His handiwork. He had constructed a giant clock-like mechanism that would never require to be wound, oiled or adjusted. He simply was not required to meddle in His own creation.

The Leibnizian description of the world, you see, effectively eliminated the necessity of any intervention on the part of God in the physical operations of the world. What Leibniz' deistic view implied was that the principles of celestial mechanics by themselves adequately explained many things which were formerly a part of religious faith. Notice that this mechanistic conception of the operation of the universe does not eliminate God from the picture, but of course, it seems to do great violence to one particular concept of God, viz., a God who necessarily is involved in the physical functioning of the universe.

The history of dynamical astronomy in the eighteenth and nine-

teenth centuries is largely a step by step success story for the Newtonian theory of gravitation in its most crassly mechanistic form. The principle of gravitation was subsequently applied to explain the most minutely observable perturbations in the motion of the moon, the planets and the comets. It adequately accounted for discrepancies with ancient eclipse records. It predicted the lunar tides, and gave a good value for the oblateness of the earth. Finally the theory predicted the location of new planets whose existence had until then been unknown. Many of these impressive scientific accomplishments were made by a brilliant group of French mathematicians, not the least important of whom was Pierre Simon de Laplace.

According to Laplace, if there were a possibility of knowing simultaneously all of the forces which animate nature, as well as the positions of all bodies at any particular moment, then it should be possible in principle to comprehend in a single formula the movements of the largest bodies of the universe as well as those of the minutest atom. All that would be required would be to have an infinitely industrious and an incredibly capable mathematician. Nothing would be uncertain for this kind of mathematical maniac. The future as well as the past would be present to his vision.

Laplace's confidence in the triumph of mechanism, with its coldly rigid demand for logic and mathematics was characteristic of the scientific temper of the times. It was true that Newton's *Principia* had satisfied the intellectuals beyond their wildest dreams. But it was also a fact that every success for the Newtonian mechanism left correspondingly less room for the direct operation of God in the running of the world. Indeed it is said that when Laplace presented Napoleon with a copy of his six volume *Mecanique Celeste* in 1825, the Emperor asked why it was that he had nowhere in his work mentioned the Creator. Laplace replied: "Sir, I had no need of that hypothesis." Laplace's Deity, like that of Leibniz did not construct machines which were in need of adjustment. The world was operating by inexorable laws according to a perpetual steady pulse in perfect harmony with all the rest of creation.

The influence of the mechanistic philosophy of the eighteenth century reached into almost every area of human thought. It was stamped upon the concept of natural laws and their operation in government and human relations. It was felt in religious circles where there was greater emphasis on reason and design. The world had been created by a God who was not required to meddle in the day-to-day affairs of men. The motions of matter were governed not by purpose, but by blind forces and laws. Life was conceived along the lines of physical and chemical systems. Illnesses were looked upon as mechanical and chemical break-

downs. Cosmological schemes of how the world came to acquire its state of configuration were explored in mechanistic terms. Serious attempts were made to explain the earth's geological structure in terms of evolutionary developments over long periods of time. Eventually the emphasis of mechanism in human affairs was extended to the search for laws governing the evolution of societies and the evolution of man. Sociology, psychology and anthropology as scientific disciplines were born.

Newton could not possibly have foreseen the outcome of his innocent scientific speculations concerning the nature of the forces which kept the planets in their orbs. The firm establishment of the mechanical stability of the solar system over indefinitely long periods of time somehow led men also to latch on to the idea that indefinite progress for mankind was assured. So, too, by the time that the idea of progress was securely established on the plane of social philosophy, it was also being cultivated in the guise of various theories of evolution.

In 1859 Charles Darwin brought out his great work *On the Origin of Species by Means of Natural Selection, or The Preservation of Favoured Races in the Struggle for Life*. The theme which Darwin explored in his theory of evolution was that the development of the different forms of plant and animal life on the earth were governed by certain fixed and inexorable laws operating by way of natural selection, population pressure and environment, and regulating the survival and distribution of species as a function of time. In any case the scientific method of experimentation, observation and theory construction were being used in an attempt to explain without any recourse to supernaturalism, the origin, abundance, and distribution of life on earth. Later on in the nineteenth century the study of the multiple and specialized mechanisms of the brain were diligently studied. Thus was born the science of neurology which has determined in rapid succession the localization of areas pertaining to motor activity, the sensory modalities, sensory functions and speech. Here again we see that science had moved into an area of thought which was once dominated by religious conceptions and beliefs. But in this case, treading on much more controversial ground.

When we look at these developments we may come to the conclusion that science qua science makes no mention of God and His purposes, confining itself in the last analysis to facts which can be fitted into the theoretical framework of the world which science constructs for itself. These omissions in science of God and His purposes are however explained by scientists themselves on purely methodological grounds and are never taken as confession of unbelief. This is just another way of saying that there is no rational connection between science and atheism unless it can be

demonstrated that science by itself can give a complete and final account of the realities of life.

We have already considered in some detail the case history of the scientific revolution which was characterized by a rather dogmatic allegiance to mechanism as a world picture. During the most optimistic time of Victorianism men never doubted that mechanism would eventually give a complete and authoritative picture of reality. There have been other scientific revolutions which have altered man's religious faith, and I submit to you that we are right now in the midst of a change of pace in scientific developments which will probably grow until it becomes greater than any previous change has ever been. Apart from all of the obvious technological achievements accomplished in recent years we can mention a number of indices which illustrate my point. It has been estimated, for example, that this country has spent more money on scientific research since World War II than it did between George Washington's inauguration and Pearl Harbor. The national annual expense for industrial research alone amounts to about seven billion dollars. It has also been said that there are more professional scientists now living than all who have ever lived before. I probably need say no more to convince you of the dominant role of science in modern society. But what are the concomitants?

The change of pace in physics and chemistry which we are experiencing got started at the very tail end of the nineteenth century with the discovery of X rays, radio activity and knowledge concerning the particulate structure of matter. With the coming of relativity theory, quantum mechanics, release of energy from the atom, electronics and automation we had a significant scientific revolution on our hands.

This revolution, first of all, has all the marks of an intellectual or conceptual revolution in which scientists have been forced to accept fundamental changes in their way of looking at the world. In the 1880's when the universe was thought to be a majestically moving mechanism of well-behaved and indestructible billiard balls, it was possible to stand back, admire the display, and be perfectly objective about it. Today the picture has altered. Waves materialize into matter, particles undulate into waves. Space gets curled up. The universe is contracting, expanding or being born out of nothing.

Nowadays the classical or Newtonian mechanistic interpretation of the universe is looked upon with much less favor in scientific circles. Mechanism as a sweeping scientific philosophy turned out to be too much of an abstraction, too restrictive and too dogmatic. The philosopher Whitehead has said that "an abstraction is noth-

ing else than an omission of the truth." Canon Raven has said: "It is a mysterious universe, and dogmatism is indecent."

The whole business of science has come under a new management. We understand more and more about the world and we are able with ever greater finesse to construct comprehensive theories which account for an unimaginable wealth of observational and experimental details. But the structure of science is now very complex.

Einstein's special theory of relativity teaches us that no human observer is privileged to stand and objectively observe the whole universe ticking away before him. Thus also Heisenberg's principle of indeterminacy shows that the process of observing nature can affect the observation. Measurement of the atom must be regarded as relative to the measurer. And so the whole language necessary to describe the world must change.

At a different level, moving in one-to-one correspondence with the radically revolutionary conceptual schemes of modern science, there is another revolution which holds almost unlimited benefits for mankind while threatening our very existence. This is a technological revolution characterized by the automation, the conquest of space and the exploration of mad men's visions. It is a revolution which has made it possible for next-to-primitive cultures to experience changes in ten to twenty years which were accomplished only over 2000 years in Western civilization.

What, in the midst of this scientific reorientation now happens to our religious concepts which makes use of notions of time, creation, eternity and providence? Are we to suppose that belief in God, the experience of prayer, and all of the meanings wrought by religion for centuries are no longer valid? Hardly! They have and will continue to teach men how to live and die. There is nothing in the findings of modern science which gives a rational basis for unbelief. Those who are on the forefront of scientific research have been some of the first to say so, and they will continue to be good scientists and good Christians without compromising one or thinning down the other.

It will of course be difficult to imagine what implications modern scientific research will have in future for the Christian faith in general and for Mennonite faith and culture in particular. The question is whether or not we will have the information, the composure and the courage to face the implications. The question also is whether our religious faith will be broad enough to cover the common ground where science and religion meet, and to accomplish this so as not to lose or even to dilute the essential and perennial elements of our Christian faith. As we face the future I believe there are certain lessons we can draw from our historical analysis. I will admit that they have been conceived along es-

entially optimistic lines of thought in what follows. For the Christian to live is Christ; to die is gain.

One of the lessons which we should have learned from the development of science by now, with reference to our religious faith, is to make certain that our religion does not become a temporary makeshift or fill-in in those areas of thought for which science has not yet accomplished significant enough advances to make positive statements. It is easy to assert glibly that science cannot give us any answers to certain problems; to hold up almost as a threat to science that only religious faith will help us there. But science has a way of moving in to close those gaps and to leave people hugging a religiously empty concept. This is what happened on a fairly large scale in the past in certain areas of astronomy, biology and medical science. Most of us could probably think of a number of changes in religious faith which we have personally witnessed over a period of time in our own Mennonite communities. It has been fairly recent that scientists have taken over major areas of the treatment of mental illness. Should we criticize science for doing so? Can we believe that Christians were really ever at ease formerly when they attempted to explain physical and mental illnesses on the basis of punishment by God for sins committed?

Religion is therefore not a stop-gap for ignorance in science. Let us test our feelings on the matter. Would we be willing to deny that meteorology as a science will someday be able to predict the weather with great certainty? And if not, then does it make any more sense to pray for rain than for an eclipse of the sun? Would we be willing to say that space ships will never bring to earth a human-like creature from some other planet? If not, then how would the creature fit into our theology of redemption and immortality? Would we find it impossible to believe that there might be other worlds in the universe populated with creatures similar to ourselves? Would we be willing to assert that scientists will never create life from inanimate matter? Then we should know that within the last decade chemists have shown that in a gas mixture, simulating a reducing atmosphere, ammonia was converted into amino acids. These acids are among the building blocks of living organisms. The unreasonable opposition of certain minds to the idea that living things can be produced in the laboratory, comes no doubt again from short-sighted apologetics. There are reasons to hope that such laboratory studies will contribute enormously to man's understanding of the nature of life itself.

A second point which I would like to make in connection with our analysis goes far beyond any mere apologetic defense of religion in the light of scientific research. It is this, that, far from

destroying the meaning and relevance of the Christian faith, modern science more than any other activity in which we are engaged, has implemented the Christian message by making it pertinent and timely. I truly believe that Christians would be in a favorable position today if they were to adopt a radically optimistic attitude toward the developments of modern science. I say this because it appears to me that the discoveries of science leave us with a plan of operation as Christians which give us vastly greater resources, greater freedom and a greater elasticity of mind than we ever have had before. I believe quite honestly that science has rid religion of mountains of nonsense. It is the knowledge of the truth that makes man free—freedom in the belief of a God unencumbered by the thousands of ifs and buts to which His name has been attached in the past.

My own practical suggestion here would be that as Christians we consider seriously the potentialities for good which would be inherent in releasing an army of highly trained scientists and technologists who would use their training and abilities as powerful tools in the accomplishment of well thought out Christian objectives. This approach would appear to be most uniquely relevant within the tradition of our world-wide Mennonite outreach which is so strongly committed to nonresistance and whose theological basis is rooted so securely in the redemptive work of Christ and His outgoing love toward mankind.

"We could do worse," to quote a statement made by Herbert Butterfield, "than remember a principle which gives us a firm Rock and leaves us the maximum elasticity for our minds: the principle: Hold to Christ, and for the rest be totally uncommitted." What this would imply would be a kind of total involvement of the Christian in a world which is largely secular. It would demand the efficient use of all the available equipment and methods of scientific inquiry to build God's kingdom. Truth is truth irrespective of the spokesman for it, and there is no reason in all the world to ever associate pure science with indifference or hostility to religion even where science thrives at the hands of the irreligious.

To go one step further, we might say that perhaps it ought not to distress us at all that an irreligious psychiatrist can help to restore a man's mental health. The worst thing that Christians might do here is to throw out the science of psychiatry with the psychiatrist. We might hope that the Christian psychiatrist, armed with the same secular tools as his irreligious colleague, would do an even better job of restoring men's mental health.

My third suggestion grows out of the conviction that the Christian who is not scientist by profession must recognize the limitations of his knowledge concerning the ever-growing complexities

of modern science. It is the Christian's duty to keep informed to some extent in scientific matters, but he must ultimately be willing to seek advice from specialists who have devoted their whole careers to the mastery of specific phases of scientific research.

Let us inquire, for example, what the well-informed and sensitive Christian's attitude might be in regard to research designed to work out the technical requirements and details for feasible methods to control atomic energy for war and peace. It would seem desirable to me that Christians do everything within their power not only to convince others of the strength of nonviolence, but to encourage those who are able to do so, to work out the scientific and technical problems involved. In large measure this task will fall upon the scientists themselves, who on the whole, to be quite realistic, are now almost the only individuals in our society equipped to handle the mechanics of effective atomic energy controls which will appeal to both East and West. Strong feelings accompanied by determined wills may result in action; but, if there is no guiding thought, it is very likely that the action will be blind and misdirected and, therefore, ineffective. The Christian may believe that science without religion cannot see what needs to be done. But religion without science has not the power to do it.

Finally I would suggest that it is worth our effort to take a close look at the behaviour and the attitude of individuals who spend their lives in the midst of scientific research. We may in fact learn from them in part where the secret of their success lies. Science today is one of the few common languages of all mankind. It is a language which can provide a most important basis for the communication of ideas between people of different political and ideological convictions. In their work, scientists the world over place the highest premium on intellectual honesty, personal integrity, hard work, tenacity, concentration, imagination, insight, and curiosity—characteristics which Christians would do well to emulate in their search for opportunities to "speak truth to power" and the building of the Kingdom.

The scientist is trained not to assert too much. He is not free to wander too far from observed facts. His generalizations and theories are tentative. They can only be approximate in their correspondence with the real world of nature. The scientist must be willing, if necessary, to sacrifice his hard-won theories when it appears that an alternative theory will serve science better. The truth of the matter is that the scientist will regard beyond the reach of exact formulation many questions which Christians would do well to approach more gingerly. Above all we must recognize that both religion and science can work together in the service of truth if we do not press them to arrive at solutions too soon and

too easily. If we compare the theologian and the scientist I think we shall discover that they have more in common than we might have suspected.

I shall leave you with a quotation from John Calvin's *Institutes of the Christian Religion* (Vol. I, Book II, Chaps. II, XV and XVI) written during a time of great scientific ferment in 1559. This quotation amounts to a plea for placing a premium on excellence in all areas of truth (and especially in science), even where the truth has been delivered to us by the heathen and impious. Why? Because God is the fountain head of truth—irrespective of the mouthpiece which proclaims it.

Calvin says: "Whenever, therefore, we meet with heathen writers, let us learn from that light of truth which is admirably displayed in their works, that the human mind, fallen as it is, and corrupted from its integrity, is yet invested and adorned by God with excellent talents. If we believe that the Spirit of God is the only fountain of truth, we shall neither reject nor despise the truth itself, wherever it shall appear, unless we wish to insult the Spirit of God; for the gifts of the Spirit cannot be undervalued without offering contempt and reproach to the Spirit himself. Now, shall we deny the light of truth to the ancient lawyers, who have delivered such just principles and civil order and polity? Shall we say that the philosophers were blind in their exquisite contemplation and in their scientific description of nature? Shall we say that those, who by the art of logic have taught us to speak in a manner consistent with reason, were destitute of understanding themselves? Shall we accuse those of insanity, who by the study of medicine have been exercising their industry for our own advantage? What shall we say of all the mathematics? On the contrary, we shall not be even able to read the writings of the ancients on these subjects without great admiration; we shall admire them, because we shall be constrained to acknowledge them to be truly excellent. And shall we esteem any thing laudable or excellent, which we do not recognize as proceeding from God? Let us, then, be ashamed of such gradient in gratitude, which was not to be charged to the heathen poets, who confessed that philosophy, and legislation, and useful arts, were the invention of their own gods. Therefore, since it appears that those whom the Scriptures style "natural men," the *physikos*, have discovered such acuteness and perspicacity in the investigation of sublunary things, let us learn from such examples.

"Now, if it has pleased the Lord that we should be assisted in physics, logic, and mathematics, and other arts and sciences, by the labour and ministry of the impious, let us make use of them; lest, if we neglect to use the blessings therein freely offered to us by God, we suffer the just punishment of our negligence."

THE ROLE OF RESEARCH AMONG MENNONITE COLLEGE FACULTY MEMBERS

By. Carl Kreider

There can be little dispute concerning the three major functions of the great university: (1) teaching; (2) public service; and (3) research. The Kennedy Administration is not the first one to "raid" great universities to provide highly competent public servants. The place of research in the great university is well understood. Federal government grants to great universities for research projects have become a large part of the operating income of many such institutions. Whether the universities have allowed their teaching function to suffer as a result of such extensive forays into public service and research activities is a subject on which there will be much difference of opinion.

The small liberal arts college may also claim to fill the three same functions noted above for the great university. It is clear, however, that the major emphasis of the small college has traditionally been on teaching. Most faculty members of these small colleges take pride in the fact that they are more successful in this job of teaching than the large university. There is an intimate faculty relationship with students which is often absent in the larger institution. The low student-faculty ratio of the small college also enables faculty members to experiment with a large variety of teaching methods.

Although some small colleges are doing a superior job in public service, as a whole they are simply not really in competition with the university in this aspect of the program. Small colleges usually do not have the resources for sizable extension programs, for adult education or for agricultural experimentation or information.

Where does the small college stand with respect to the third function—research? It is clear that here too the small college has some real disadvantages to face. In the first place, we do not have graduate students. Although most university professors probably have a conscience against publishing student research under their own names they certainly tend to make extensive use of student assistants in helping with at least the tedious parts of their own research. In the second place, the small college rarely has more than three or four faculty members in a single department. Since most of the Mennonite colleges are small "small col-

leges" a good many departments will probably have only a single faculty member. These small departments pose two serious problems for the faculty member interested in research. For one thing there is often no other person on the faculty with whom he can discuss the technical features of the research project he wishes to pursue. He thus lacks the mutual stimulation that one would find in the large university department where in some cases teams of scholars are working on closely related projects. The second, and possibly even more serious problem which the small department poses is that the faculty member has a heavy teaching load and the courses which he teaches are rather widely scattered among the various facets of a single discipline. The task of just keeping up to date in the new material related to the courses he is teaching is often overwhelming. Furthermore, since research is by its very nature a specialized activity the particular research project he has under way may have a relevance to only a relatively small portion of one of the five different courses he is teaching.

In the third place, research is expensive. The sheer cost of equipment for some types of research in the natural sciences places such research entirely out of the reach of all but the largest and wealthiest institutions. Even social research these days often requires the use of expensive computing machines. (I could have made effective use of such a machine in tabulating the results of the questionnaire I distributed in connection with the preparation of this paper.) But the most significant cost for many types of research is the time of the research worker. If he is going to do effective research during the academic year I am convinced that ways must be found to reduce significantly his teaching loads. Although some progress can usually be made in reducing teaching loads without incurring higher faculty costs, reductions of sufficient magnitude to permit extensive research are inevitably going to be expensive. If the faculty member is going to engage in research during the summer months he must either be paid for his nine months of teaching a salary adequate to compensate for his services to society over a twelve month period or he must be paid a special stipend for his summer research activity.

One of the best of the recent studies of research in liberal arts colleges is "Research and Teaching in the Liberal Arts College" a report of the Wooster (Ohio) conference sponsored by the Division of Chemical Education of the American Chemical Society, June 22 to July 2, 1959. Two questionnaires, one of ten pages and the other of seven pages were sent to the chemistry department of a large number of liberal arts colleges prior to the Wooster Conference, and the results of the questionnaires were available at that time. There is not space in this paper to give even a brief summary of all of the findings of this conference but a few out-

standing points may be noted. Research was not counted as part of the faculty load in most of the colleges. Out of 100 colleges, 92 provided no special summer stipend for research and the nine month salary was too low to permit the faculty member to work without a stipend. A general lack of equipment and facilities for research was noted, and the feeling was recorded that although most administrators gave "encouragement" to research, few provided any actual "help."

The questionnaires sent to faculty members of Mennonite colleges was much simpler in form. Questionnaires were sent to the deans of Bethel, Bluffton, Eastern Mennonite, Freeman, Goshen, Hesston, Messiah, Tabor, and Upland colleges. The total number of faculty members at these colleges was not determined but it is believed that the 184 questionnaires which were completed and returned represent in excess of 80 per cent of the total teaching faculty. The cooperation of the deans and faculty members of the colleges is deeply appreciated. Furthermore, 77 out of the 184 faculty members filling out the questionnaires took the additional trouble to write suggestions. Some of the suggestions were fairly extensive, covering more than a full page.

Tables 1 through 6 have been prepared to provide a summary of the statistical information gained from the completed questionnaires. Table 1 indicates that 71 faculty members representing nearly 40 percent of all faculty responding to the questionnaire have research projects under way at the present time. Social science faculty members seem to be most interested in research with nearly two-thirds of all faculty members in this field reporting research in progress. Faculty members in education, nursing, home economics, and physical education had the smallest proportion with research now in progress—only a little over one-fifth so reporting. It should be observed, however, that the questionnaire did not attempt to define research. In the comments two faculty members indicated that they were engaged constantly in research in the current literature in the fields they were teaching. Other faculty members are certainly also engaged in this type of "research" but did not choose to call it such. Three faculty members mentioned in their comments the high importance of research in the improvement of the college program (faculty self-study) but all three of these persons did not report a research project under way at the present time. Although these people probably participated in faculty institutional research projects they assumed that the question in the questionnaire referred only to research in their own scholarly disciplines.

Table 2 is a tabulation of the answers to item 6 on the questionnaire: "How important do you feel it is for our church-related liberal arts colleges to encourage faculty members to do continu-

ing research?" It will be observed that 41 per cent thought that it was very important, 44 per cent thought that it was important, 13 per cent of some importance, and only 1 per cent not important. As would be expected those now engaged in research were more likely to consider it very important than those not so engaged (56 per cent as compared with 31 per cent) but the number of those not now engaged in research who deem it either very important is surprisingly large—nearly four-fifths of the total. Faculty members in the social sciences were most likely to mark it "very important" (53 per cent), those in Bible and philosophy least likely (26 per cent). In this day of tremendous interest in research in the natural sciences it is interesting to observe that the only two faculty members in Mennonite colleges who marked research as "not important" were teachers in the natural sciences.

If adequate finances were available to support research what per cent of your time should be spent in research activity? Table 3 presents a tabulation of the replies to this question. By far the largest proportion (71 per cent) would feel that ideally from 10 to 25 per cent of faculty time should be spent in research activity. Those now engaged in research would, of course, spend more time than those not now so engaged. Those holding doctor's degrees would spend more time than those who do not hold such degrees. Nearly 10 per cent of the social scientists thought the ideal time was 50 per cent or more and 26 per cent thought 25 per cent or more of their own time should be spent on research. The natural scientists were a close second with 23 per cent wishing they could spend one-fourth or more of their time on research.

But, alas, our ideals are not realized. Table 4 records the amount of time faculty members report they actually spend on research. More than 90 per cent spend less than 10 per cent of their time on research but of course this includes the 61 per cent who do not now have a research project under way and thus presumably are spending no time in research activity at all. Those now working on their doctorates are spending significantly more time on research than faculty of any other category. More social scientists report spending more time on research than the other divisions of the faculty.

Table 5 shows the extent to which faculty members have published the results of their research findings. Only 28 per cent of the faculty members had published anything of a scholarly sort. However, slightly over half of these now engaged in research have published, and nearly 58 per cent of those holding doctorates have published. In the various divisions of the faculties the publication rate is highest in the social science divisions where nearly 57 per cent have published, and lowest in the education, nursing, etc. divisions where only 15 per cent have published. The 51 faculty

members who have reported publications have published a total of 188 articles in scholarly journals. This figure, however, must be interpreted. In the first place it does not include the publications of three of our Mennonite faculty members who are known for their scholarly productivity. Two of these people reported that they had published "many" articles and the third indicated "several" articles published. I would presume that if we had the actual statistics from these authors our total would be explained by at least 20 to 25 articles. Incidentally, as the table indicates these three faculty members are all doctorates, now engaged in research in the field of the social sciences. In the second place, the questionnaire did not define "scholarly journal." The *Mennonite Quarterly Review* has the format of a scholarly journal, and presumably articles published in this journal were counted. *Mennonite Life* has a popular magazine format and presumably articles published in this magazine were not counted. Certainly, however, some of the articles published in *Mennonite Life* are as scholarly (or more so) than some of the articles published in *MQR*. In the third place, it is obvious that this table provides only a quantitative measurement of publication. A qualitative measurement would have been more significant.

Table 5 indicates that the division of the faculties with the highest ratio of scholarly articles to faculty members publishing is the education, nursing, etc. division. It should be observed, however, that one faculty member accounted for 35 of the 41 articles published. In effect my ratio provides an arithmetic mean of the number of articles published per faculty member. In this instance, and probably in others also, a median would have provided a more meaningful figure.

Table 6 shows the importance faculty members attached to various suggestions for stimulating research. For the faculty members as a whole the number one priority item is the reducing of teaching loads. In the space provided at the end of the questionnaire for additional comments six faculty members also called attention to this problem. A typical comment was "In the sciences I feel the basic problem is one of time. Money can usually be obtained through various grants but as long as course work is heavy any research is prohibited." Another faculty member stressed the responsibilities faculty members have in addition to classroom teaching: "The heavy demands placed on faculty members have in addition to their rather heavy teaching loads makes research almost impossible. Administrative responsibilities, committee work, 'going to required meetings' to name but a few added duties, drains one's energies. Any kind of creative work requires time."

Table 6 also shows that the second suggestion in order of importance is that Sabbatical leaves emphasizing research should be granted. Some faculty members commented that part-time research during the winter months is not very profitable, especially in the natural sciences where extensive blocks of time are required. Sabbatical leaves provide not only large blocks of time but they permit the research worker to leave the campus where he is teaching and where research facilities are limited. However one faculty member warned that there are other valid objectives to Sabbatical leave program (foreign travel, e. g.) that it would be unwise to limit leaves to those granted for research purposes. The high priority assigned to Sabbatical leaves by faculty members in some institutions may arise from the fact that some of the colleges studied do not have any Sabbatical leave program at all. In this study no tabulation was made for differences in response by faculty members in different institutions.

Third in importance on the list is the payment of salaries to faculty members for research conducted in the summer months. Fourth in importance would be the granting of a small budget for research for faculty members requesting it. One faculty member commented that the modest size suggested by the questionnaire (\$100) was entirely inadequate for research in the natural sciences. Fifth in importance would be the provision of student research assistants. One faculty member commented that this would enable faculty research activity to have a more significant educational impact upon the student chosen to serve as assistant. Sixth in importance was the suggestion for a faculty committee to review requests for research assistance. Seventh in importance was the appointment of a faculty research director, and eighth greater recognition to research needs in the purchase of books for the library.

There was a striking amount of uniformity in the responses of different groups of faculty members to these various suggestions. As usual, however, social science faculty members were out of step with the rest of the faculty. These faculty members placed primary importance on Sabbatical leaves and rated library purchases second in importance.

Reference has already been made to some of the additional suggestions made by faculty members in response to item 11 on the questionnaires. In addition, 10 faculty members called attention to the urgent necessity of administrative support for research activity. The most succinct statement in this regard was made by a college dean. "The principal need is that research be affirmed among the institutional objectives. This affirmation then needs to be concretely expressed, the programs reviewed." The sharpest statement commented (in part): "During my first one and one-half years on the faculty, I *never* received *any* indication

that the administration considered research or publication even desirable." (emphasis his)

Ten faculty members commented on the unique role and responsibility of the Mennonite college in conducting research of special interest to the Mennonite Church. One faculty member commented: "Very little original and creative thought directed at the solution of problems confronting the Mennonite Church has come from our college faculties. Moreover, there is little likelihood that significant creativity will be forthcoming as long as we value talking more highly than thinking. Neither saints, nor great philosophers, not even great teachers, can be produced when confined to an endless round of conventional activities without ample time for undisturbed contemplation, reflective reading and creative writing. This our colleges have not been willing to provide." Another faculty member stated the issue in these words: "I feel that research of a sort (perhaps 'creative thought of leadership and planning' would be better terminology) should be in progress continually in those areas of Mennonite Church life which need new vitality or more clarity of definition." But the counsel was by no means identical in form. Several faculty members expressed this view: "Let the big universities do the tedious and laborious research... Focus our research upon frontiers in which the Christian Church confronts human need." On the other hand this opinion was expressed: "But research means that our Christian institutions begin to bear their share of the burden of leadership in the discovery of new truth. It would seem obvious that Christian colleges should be especially interested in those areas of study which are the closest to her concern, such as social sciences, theology, etc. But even in the physical sciences research should be emphasized, preferably by grants from outside sources." Another faculty member stated "There has been too much introverted research in Mennonite colleges—research about Mennonite subjects, for Mennonite consumption, and often to bolster the Mennonite ego. We need to contribute more time to primary research in pertinent social and international issues." Two faculty members suggested that the various Mennonite colleges should coordinate faculty research.

By far the most frequent comment made by faculty members was a comment on the relationship between teaching and research. Twenty-three faculty members' comments related to this problem. Of these, five were enthusiastic in their support of research activity. For example: "I have found research to be the greatest single factor in improving my classroom teaching of routine material." Another natural scientist: "Few activities are as refreshing from a scholarship viewpoint." A social scientist: "I think research activities carried out by faculty members are important not

only because they enable the scholarly world to push back the frontier of knowledge but also because they stimulate better teaching."

On the other hand, 18 faculty members used the comment section of the questionnaire to issue a warning that research activity does not necessarily produce better teaching. An outstanding science teacher with a lifetime of service behind him (and who, incidentally, has stimulated many students to enter research) stated: "I have attended four institutions of higher learning and have found that those of my instructors who were engaged in a research project were Research Men, but not teachers or very poor teachers, really no teachers at all, whereas those who did not engage in research while teaching were superb teachers. Since I was preparing to teach and had dedicated my life to this work, I wished to be a good teacher, therefore no research project while engaged in teaching." A member of a Bible department faculty: "Our first task is instruction. We should use the results of research as specialists only as it enriches our teaching. Engaging in research will not necessarily make one a better teacher. As full-time teachers we can't compete with full-time research specialists. Teaching and research are two separate callings. A very few excel in both." A member of a music faculty who currently has a research project under way: "I am all for the encouragement of research among the faculty members of Mennonite schools. But, faculty rank and promotions must never be based on the amount of research a given faculty member has done. We must be first of all great teachers and I'm not at all sure that doing research insures your efficiency as a fine teacher. This must all be kept in careful balance." Still another musician points out that for him effectiveness as a teacher demands creative activity in practice and composition more than research activity.

A professor of modern languages and literature commented: "I do not feel that the church has a responsibility to subsidize research not related fairly directly to teaching in the colleges it supports or to the church. To use church money for research for research's sake appears to me a misuse of its funds." A chemist stated: "Teaching (the best possible) should be stressed as the prime objective. Creativity should be stressed as a second parallel objective. The universities have gone overboard with research to the point where much poor teaching has resulted. They are beginning to correct this now. Research proper has a definite place in our small colleges. It must be kept secondary."

Conclusion.

It is manifestly impossible to state a conclusion with respect to research to which all Mennonite college faculty members would agree. It is also probably unnecessary to attempt such a state-

ment. I would, however, like to submit the following theses as a result of my own studies of the completed questionnaires:

1. Mennonite scholars have made a contribution to the frontiers of knowledge through original research.

2. The overwhelming majority of faculty members in Mennonite colleges would like to spend more time on research than their present schedules allow.

3. The primary function of the liberal arts college is the teaching function. Research and church or community service are only of secondary importance. They should be encouraged only when they serve to stimulate better teaching, when they interfere with the teaching function they should be permitted only when they can be supported by funds clearly earmarked for this purpose, not by student tuition.

4. Unless specially earmarked funds are received to support research activity, faculty teaching loads during the regular academic year cannot be reduced sufficiently by college administrations to permit research to be continued as a part of a regular teaching load. The administrations of the colleges should concentrate rather upon encouraging research through the provision of summer stipends and through Sabbatical leaves.

5. Faculty members can contribute to the lightening of their own teaching schedules (thus releasing time for research or for other activity contributing to their teaching effectiveness) by seeking to prevent an undue proliferation of course offerings in their own fields and by developing new techniques of teaching larger numbers of students at a time. In particular, in our smaller colleges especially, careful study must be made to determine whether small classes are as effective as sometimes claimed. If a faculty member (often because of his own grandiose conception of what constitutes a "respectable" number of course offerings for a department) tries to teach too many different courses he is probably spending much time sharing nonsense with his students. In this case it is no more defensible to share this nonsense in a small class than in a large one.

6. Mennonite colleges should be more alert to the possibilities of securing funds from non-church sources to support research activity. Using college funds may in this instance be justifiable as a sort of "pump priming" process. An initial college grant may create the setting in which the college will be successful in securing outside help.

7. Institutional self-study and research are a vital part of the program of small colleges. Some educators are raising questions of whether the private or church related small college can endure in the face of the competition from public institutions lavishly financed to care for the flood tide of students in the 60's. Inasmuch as Mennonite colleges are likely to remain "small" our future can be assured only if our academic programs are sound, our teaching methods effective. One of the most urgent problems which confronts us is to conduct research which will determine the effectiveness of our curricula and our teaching methods.

TABLE 1.

EXTENT OF FACULTY PARTICIPATION IN RESEARCH

DEPARTMENTS:	in Progress		not in Progress	
	number	per cent	number	per cent
Humanities	21	41.4	30	58.6
Social Sciences	19	63.5	11	36.5
Natural Sciences	13	37.2	22	62.8
Bible and Philosophy	8	38.1	13	61.9
Education, Nursing, etc.	10	21.3	37	78.7
TOTAL	71	38.6	113	61.4
GRADUATE STUDY COMPLETED:				
Doctor's degree completed	42	62.8	25	37.2
Working toward a degree	17	100.0	0	0.0
Not working toward a degree	12	12.0	88	88.0
TOTAL	71	38.6	113	61.4

TABLE 2.

FACULTY ESTIMATE OF IMPORTANCE OF RESEARCH

	Very Important		Important		of Some Importance		Not Important		TOTAL
	number	per cent	number	per cent	number	per cent	number	per cent	
Now engaged in research	39	56.5	27	39.1	3	4.4	0	0.0	69
Not now engaged in research	35	31.2	54	48.3	21	18.7	2	1.8	112
TOTAL	74	41.1	81	44.5	24	13.3	2	1.1	181
With doctorate	33	51.5	21	32.8	9	14.1	1	1.6	64
Working on doctorate	9	50.0	9	50.0	0	0.0	0	0.0	18
Not holding doctorate or working toward	32	32.3	51	51.5	15	15.2	1	1.0	99
TOTAL	74	41.1	81	44.5	24	13.3	2	1.1	181
Humanities	21	42.0	24	48.0	5	10.0	0	0.0	50
Social Sciences	16	53.5	10	33.3	4	13.2	0	0.0	30
Natural Sciences	15	42.7	14	40.0	4	11.5	2	5.8	35
Bible and Philosophy	5	26.3	11	57.9	3	15.8	0	0.0	19
Education, Nursing, etc.	17	36.2	22	46.8	8	17.0	0	0.0	47
TOTAL	74	41.1	81	44.5	24	13.3	2	1.1	181

TABLE 3.

AMOUNT OF TIME IDEALLY SPENT ON RESEARCH

	50% or more		25-50%		10-25%		less than 10%		TOTAL
	number	per cent	number	per cent	number	per cent	number	per cent	
Now engaged in research	5	7.3	14	20.3	45	65.1	5	7.3	69
Not now engaged in research	0	0.0	8	7.1	83	74.2	21	18.7	112
TOTAL	5	2.8	22	12.2	128	70.6	26	14.4	181
With doctorates	4	6.2	11	17.2	41	64.2	8	12.4	64
Working on doctorates	0	0.0	2	11.1	15	83.4	1	5.5	18
Not holding doctorate or working toward	1	1.0	9	9.1	72	72.6	17	17.3	99
TOTAL	5	2.8	22	12.1	128	70.6	26	14.4	181
Humanities	2	4.0	5	10.0	36	72.0	7	14.0	50
Social Sciences	3	9.7	5	16.1	18	58.1	5	16.1	31
Natural Sciences	0	0.0	8	22.8	25	71.5	2	5.7	35
Bible and Philosophy	0	0.0	2	11.1	14	77.8	2	11.1	18
Education, Nursing, etc.	0	0.0	2	4.3	35	74.4	10	21.3	47
TOTAL	5	2.8	22	12.2	128	70.6	26	14.4	181

TABLE 4.

AMOUNT OF TIME ACTUALLY SPENT ON RESEARCH

	50% or more		25-50%		10-25%		less than 10%		TOTAL
	number	per cent	number	per cent	number	per cent	number	per cent	
With doctorates	0	0.0	3	4.7	5	7.8	56	87.5	64
Working on doctorates	0	0.0	2	11.1	2	11.1	14	77.8	18
Not holding doctorate or working toward	0	0.0	1	1.0	4	4.0	94	95.0	99
TOTAL	0	0.0	6	3.3	11	6.1	163	90.6	181
Humanities	0	0.0	2	4.0	3	6.0	45	90.0	50
Social Sciences	0	0.0	2	6.5	2	6.5	27	87.0	31
Natural Sciences	0	0.0	0	0.0	2	5.7	33	94.3	35
Bible and Philosophy	0	0.0	1	5.5	1	5.5	16	89.0	18
Education and Nursing	0	0.0	1	2.1	3	6.4	43	91.5	47
TOTAL	0	0.0	6	3.3	11	6.1	163	90.6	181

PUBLICATION OF RESEARCH FINDINGS

	No Publications		Publications		Number of Journal Articles		Books
	number	per cent	number	per cent	ratio to faculty members publishing	ratio to faculty members publishing	
Now engaged in research	35	49.5	36	50.1	150*	4.2	35 1.0
Not now engaged in research	95	86.4	15	13.6	38	2.5	6 0.4
TOTAL	130	72.0	51	28.0	188	2.7	41 0.8
With doctorates	27	42.3	37	57.7	157*	4.3	34 0.9
Working on doctorate	16	88.9	2	11.1	4	2.0	0 0.0
Not holding doctorate or working toward	87	87.9	12	12.1	27	2.2	7 0.6
TOTAL	130	72.0	51	28.0	188	2.7	41 0.8
Humanities	42	84.0	8	16.0	13	1.6	4 0.5
Social Science	13	43.3	17	56.7	79*	4.7	21 1.2
Natural Science	22	62.8	13	37.2	38	2.9	0 0.0
Bible and Philosophy	13	68.4	6	31.6	17	2.8	9 1.5
Education, Nursing	40	85.2	7	14.8	41	5.8	7 1.0
TOTAL	130	72.0	51	28.0	188	2.7	41 0.8

* In addition, two faculty members reported they had published "many" articles and one indicated "several" articles published.

TABLE 6.

SUGGESTIONS FOR STIMULATING FACULTY RESEARCH

(Average Rank Order of Importance)

	Teaching loads should be reduced	Faculty research recognized in library purchases	Modest budget for research provided to faculty members requesting it.	Salaries paid faculty for summer research	Sabbatical leaves emphasizing research	Director of faculty research appointed	Opportunities to report research to faculty meetings.	Faculty committee review requests for research assistance	Student research assistants should be made available on request.
Now engaged in research	1	8	4	3	2	7	9	6	5
Not engaged in research	1	9	4	3	2	8	7	6	5
With doctorates	1	8	4	3	2	9	7	6	5
Working toward doctorates	2	8	4	1	3	7	9	6	5
Not holding doctorates or working toward	1	7	4	3	2	8	9	6	5
Humanities	2	7	4	3	1	9	6	5	8
Social Science	4	2	5	3	1	7	9	6	8
Natural Science	1	6	4	2	3	9	8	7	5
Bible and Philosophy	3	8	4	2	1	6	7	5	9
Education, Nursing	1	6	4	2	3	7	9	8	5
TOTAL	1	9	4	3	2	7	8	6	5

PROCEEDINGS OF THE THIRTEENTH CONFERENCE ON

Please return this questionnaire to your college dean by April 15, 1961.

QUESTIONNAIRE ON FACULTY RESEARCH
COUNCIL OF MENNONITE COLLEGES, INC.

(Prepared by Carl Kreider, Goshen College)

For the June 1961 meeting of the Conference on Mennonite Cultural Problems, I have been asked to prepare a paper on "The Role of Research Among Mennonite College Faculty Members." Your completion of the following questionnaire will make my paper more significant. I will deeply appreciate your help.

1. Name _____ Academic Rank _____
2. Field of teaching _____ Credit Hours per week _____
 Per cent of your time during school year spent in administrative duties, if any _____
3. College and University degrees earned:

Degrees	Dates
_____	_____
_____	_____
_____	_____
_____	_____
4. Do you have a research project in progress at the present time? Yes____; No____.
 If answer is "yes" is this research related to your candidacy for an advanced degree? Yes____; No____ Is it an outgrowth of research for a degree already completed? Yes____; No____
5. Give title(s) of research project(s) underway at present time. _____

6. How important do you feel it is for our church-related liberal arts colleges to encourage faculty members to do continuing research? (1) Very important____; (2) Important____; (3) Of some importance____; (4) Not important____
7. If you feel research is important, and if adequate finances are available to support it, what per cent of your time do you think should be spent in research activity? 50% or more____; 25-50%____; 10-25%____; less than 10%____
8. What per cent of your time do you actually spend in research activity? 50% or more____; 25-50%____; 10-25%____; less than 10%____
9. Have you published the results of your research in scholarly journals or in book form? Yes____; No____ If "yes" how many articles in scholarly journals? _____
 How many books? _____

10. The following is a list of suggestions for stimulating research by faculty members in Mennonite Colleges. Please rank them (1, 2, 3, etc.) in the order of their importance in your estimation. Unimportant items should be marked with "0". Please add any other suggestions you think of.
- _____ a. Teaching loads should be reduced.
 - _____ b. Faculty research needs should be given more attention in purchasing library materials.
 - _____ c. A modest budget (up to \$100 per year) for research should be given to each faculty member requesting it.
 - _____ d. Salaries should be paid faculty members who engage in research in the summer months.
 - _____ e. Sabbatical leaves emphasizing research should be granted.
 - _____ f. A director of faculty research should be appointed.
 - _____ g. Faculty members should be given opportunity to report on their research to meetings of the faculty.
 - _____ h. A faculty committee should be appointed to review faculty requests for assistance in research.
 - _____ i. Student research assistants should be made available to faculty members requesting them.
 - _____ j. Other suggestions: _____
 - _____ k. _____
11. Please write below (and/or on as many additional sheets as you need) any additional suggestions or comments concerning the role of research among Mennonite College Faculty members.

RESEARCH ON COMMUNICATING OUR FAITH THROUGH PUBLIC WORSHIP

By Paul M. Miller

Introduction

When Gotthard Everett Arden studied "The Interrelationship Between Cultus and Theology in the History of the Lutheran Church in America" he complained that his research was extremely difficult. He said that this was due to the fact that Lutheran liturgy and Lutheran Creeds and theology were not precise enough to make an accurate comparison possible. Any person with some experience in research can imagine the monumental difficulties faced in a comparison of Mennonite Theology and Mennonite worship since both creedal formulations and liturgical formulae are nonexistent.

Nearly all of the problems which beset the researcher were constantly besetting this research project. There was a dearth of research by predecessors in any field closely related to it. There were the problems of selecting a statistical universe, an adequate method of random sampling, the securing of a natural or typical situation to observe, and the building up of a recognition readiness so that the investigation could do "skilled seeing." Great care was required to set up provisions to detect and eliminate personal bias, and to protest the tool as to its reliability and validity. The researcher needed to be constantly aware of the fact that genuine worship moves under the sovereignty of the Holy Spirit, that the "Spirit bloweth where he listeth" and that no empirical research can scientifically isolate and control all of the variables which are part of the total experience which is under investigation.

- I. Thesis Topic: An Investigation of the Relationship Between Mennonite Theology and Mennonite Worship.
- II. Statement of the Problem
How adequately does the contemporary worship of the Mennonites embody and reinforce the contemporary theology of the Mennonites? Is the faith of the Mennonites being expressed in the worship services of the Mennonites?
Facets of the problem include questions such as the following:
 1. What concepts of God's triune nature, creating activity and loving providence are held by Mennonite theology and are these the concepts which echo through the sermon, song, and prayers of Mennonite worship?
 2. How and why does God reveal Himself and how is God's

self disclosure expected within Mennonite worship?

3. What does Mennonite theology say about man's nature and need and God's remedy for that need, and what is being said and symbolized within Mennonite worship on this matter?
4. What does Mennonite theology affirm about the place of the church and of individual discipleship in living the Christian life and what is observable in Mennonite worship emphases?
5. What does Mennonite theology ask Mennonites to believe and practice with respect to ordinances, social responsibility, nonconformity to the world, relation to the State, discipline within the church, nonresistant love, transparent truthfulness, etc., and what beliefs on these matters are being reinforced by Mennonite worship?
6. What eschatology is advocated by Mennonite theology and what is being expressed by Mennonite worship?

III. The Hypothesis Being Tested by the Study

The hypothesis with which this study is approached is as follows: Mennonite worship is primarily a service of admonition, (going to church to be told by the preacher to keep all of "the all" things of the "Word" as set forth in church pronouncements.) and these admonitions to reinforce the faith of the Mennonite Church as this is set forth in officially approved statement. The hypothesis was tested on each one of its assumptions.

1. Is the worship service primarily admonition, or are thanksgiving, adoration, commemoration of God's redeeming deeds, claiming God's mercy and forgiving grace, etc., more dominant?
2. Is Mennonite worship pulpit- and preacher-centered, or do other foci emerge more prominently?
3. Are the "all things of God's word" to which persons are pointed coextensive with the "officially approved" Mennonite statements?
4. Are the ordinances and symbols used in worship being observed in order to be obedient "to the all things," or primarily as aids in communicating spiritual meaning and reality between worshippers?

IV. Related Problems

While the factual center of the dissertation study was a comparison of the theology of the Mennonites as expressed in an abstract of exact quotations from officially approved confessions and books, and the worship of the Mennonites as represented by verbatim records of scientifically selected samples of worship services, there are many related problems which were probed, because the findings in these related problem areas give depth and meaning to the central problem under study. Samples of these related problems included the following:

1. What does Mennonite theology imply about the ability of an "obedient" Christian who "keeps the things" to confront the living God in a worship disclosure? Should confession be an expected part of the worship encounter, or are backsliders who are being reinstated into fellowship the only ones who confess that their lips are unclean?

2. How does Mennonite theology indicate that dramatic and material symbols communicate meaning or mediate grace to the worshiper, and what seems to be implied by what is said and done in Mennonite worship? To what extent, if any, have Mennonite symbols become sacraments?
3. What does Mennonite theology imply about the centrality of propositional exhortation in communicating spiritual reality? Is the "metaphorical conjunction" power of the verbal symbol as used in the sermon elevated to near-sacramental power? What is the basis of the sermon-centeredness of Mennonite worship?
4. What is the dynamic for ethical living as set forth in Mennonite theology and how well is this reinforced by the emphases of Mennonite worship?
5. What does Mennonite theology assert regarding charismatic gifts and miraculous or ecstatic experiences in the life of the church and what is revealed by an observation of Mennonite worship practices?
6. What does Mennonite theology affirm about the question: "Is literal and full obedience to the Sermon on the Mount possible now?", and what are Mennonite worship services suggesting about the matter?
7. What logical conclusion would one draw from Mennonite theology as to the objective or subjective focus of a worship service? To what extent should worship be objective and to what extent subjective and how are worshipping Mennonites actually solving this problem?
8. What does Mennonite theology declare or infer as to the place of the art form, the artistic and the aesthetic in Mennonite church life and worship? What can be observed in the practice of Mennonite worship?
9. What inroads or borrowings are going on in Mennonite worship which may affect Mennonite theology? What borrowings can be detected from Puritanism, Pietism, Quakerism or other patterns of worship to which Mennonites have been "exposed"?
10. What, if any, should be the place of "sacrifice" within the God-man interaction, and what can be observed within Mennonite worship which indicates what Mennonites really believe regarding this problem?
11. What would Mennonite theology imply as to the necessity of involvement, every member's active participation in the worship activity, and what do Mennonite worship practices reveal?

V. Basic Concepts to Be Employed

"Mennonite Church" refers to the oldest and largest of sixteen or more separate Mennonite church bodies in the United States and Canada. The informal designation "Old" Mennonite Church is sometimes used to distinguish this group from other Mennonite bodies. There are some 82,000 baptized members worshipping in 990 congregations in the United States and Canada. It was not feasible to include other Mennonite bodies since worship practices were not constant enough among them. "Contemporary pattern" of worship refers to the liturgy or form of worship which has taken shape and is being followed in the formal worship services in Mennonite congregations in the midwestern section of the United States.

"Public worship" refers to those regular and formal Sunday morning services of the congregation, held in the church building, and led by the pastor or minister in charge. Family worship or meetings in the church of small groups from within the congregation were not under study.

"Contemporary theology" of the Mennonite Church refers to the presently held faith of the Mennonites as set forth in books and confessions of faith which have been given General Conference endorsement during the last forty years.

VI. Procedure and Methodology

Phase 1. Mastering the history of worship and achieving an understanding of the relationship which has existed between cultus and theology, between the faith of a people and the worship of a people.

In order to have a background of understandings against which to evaluate contemporary Mennonite worship practices and their relationship to Mennonite theology, I studied carefully more than 100 volumes of the best literature relating to the history of worship, basic principles which control worship, experiences which are essential to worship, the use of the verbal and the nonverbal symbols to communicate spiritual reality, and the experiences of song, sermon, prayer, offering, and ordinances or sacraments in the total worship life of the church.

VI. Procedure and Methodology

Phase 2. Compiling a "Mennonite Theology"

In order to have a detailed and comprehensive statement of officially approved Mennonite theology against which to test the verbatim records of Mennonite worship services, I compiled an abstract from all of the thirteen existing confessions, books, and theological statements adopted or endorsed by General Conference during the past forty years. The Committee now appointed by General Conference to draft a new Confession of Faith for the Mennonite Church has received General Conference approval for an outline of 91 points around which they intend to gather a Confession of Faith. I assembled around these 91 subpoints key sentences and quotations from all the thirteen approved Confessions which have served the church for the last forty years, and this abstract served as the Theology of the Mennonites.

VI. Procedure and Methodology (continued)

Phase 3. Creating the observation form or "tool."

The observation form contained a section of basic information, a section on Official Mennonite Theology, a section on Newer Mennonite Emphases not yet reflected in the official statements, a section to detect borrowings in worship from all the major types of worship, a section to evaluate invocation, prayers, sermon, song, giving, benediction, material and dramatic symbols, and other pertinent information. This tool contained about five hundred check points to sensitize observation in Mennonite worship, but the most crucial part of it was the "factual center," the 91 point outline of a Mennonite Confession of Faith.

This tool was pre-tested a number of times and questions which were lacking in discriminative power were eliminated

before the official sampling. Six volumes which elaborate research methodology were studied in preparation for the task of creating the observation form and carrying through the research design.

VI. Procedure and Methodology

Phase 4. Locating the "statistical universe" from which the sample was to be drawn.

An area of the (Old) Mennonite Church possessing sufficient geographical contiguity and cultural and theological homogeneity needed to be found. Upon the advice of the officers of the Mennonite Research Foundation, the four-state area of Illinois, Indiana, Michigan and Ohio seemed to be such an area. All worship services were not studied, but only the Sunday morning worship service. The research did not attempt to study all worship services of all Mennonite groups in all areas, but studied a representative Sunday morning worship service of representative congregations in the (Old) Mennonite congregations of Illinois, Indiana, Michigan and Ohio.

The "Church Year" of Mennonites was not under study since all observations were made between July 9 and December 20, 1960. Worship "effectiveness" not under study, that is, how persons heard or were changed by it. All symbols which communicate meaning were not under study, only the verbal symbols. By placing together in one whole all of the 1202 paragraphs of verbatim material, a composite entity was produced which was regarded as "Mennonite Worship," and which was analyzed as such.

VI. Procedure and Methodology

Phase 5. Securing the "sample congregations" to observe at worship.

Following the advice of officers of the Mennonite Research Foundation, the congregations of a four-state area—Indiana, Michigan, Ohio, and Illinois—were used from which to draw a fifteen per cent sample (21 congregations). Categories of rural, urban, mission, and independent were set up before the random sampling to insure a sample which includes representation of all types of congregations. The table of random numbers from the book *Statistical Inference* used to draw the random sample of congregations. The assistance of a trained sociologist and researcher was secured during the actual drawing of the sample. Skip intervals of 7 were used to draw a 15 per cent sample.

VI. Procedure and Methodology

Phase 6. Observing the worship in the sample congregations. Pastors of the sample congregations were informed by letter of the purpose of my coming and asked to report any Sunday when they foresaw that their service would not be average or typical. If such are reported, I would avoid going on that Sunday. Thus the pastor did not know upon which Sunday to expect me but when I did show up in the worship service, he knew what I was doing there.

I took a tape recording of the entire service and observed and recorded firsthand those things which could not be gotten from a tape recording later. Later I listened again to the

tape recording to insure accuracy of impressions. Then a verbatim manuscript of every word that was read, sung, or said in the worship service was typed from the tape, and it was this verbatim record which was checked by "content analysis" for theological ideas and compared with the statement of Mennonite theology.

VI. Procedure and Methodology

Phase 7. Method of assembling and reporting the findings. The advice of the Bureau of Research and Survey of the National Council of Churches proved valuable here. I did "content analysis" examining each paragraph of the verbatim and noting how many of the 91 points of Mennonite theology were mentioned in the verbatims. Each of the 91 points was recorded in either of four categories: (1) this theme missing altogether; (2) some attention given to this theme; (3) considerable attention given to this theme; and (4) this theme the major theme of the paragraph. In presenting the findings, I tried to avoid becoming immersed in detail or in the pedantic and arid exercise of attempting to construct charts and graphs of exceedingly complex material. I endeavored to report the themes receiving considerable and major emphases in Mennonite worship and to show how well these emphases compared both in coverage and vigor to the themes and emphases of Mennonite theology. In this intensive content analysis the 1202 paragraphs of material in the verbatims of the 21 worship services were treated as one composite whole.

VII. Safeguards Used to Maximize Objectivity

Eleven distinct safeguards were used during the study to insure objectivity, freedom from bias, and accuracy.

1. The opinion of the officers of the Mennonite Research Foundation was followed in the limiting of the geographical and culturally homogenous area within which to carry on the study.
2. In deciding which very small mission stations should be eliminated from the statistical universe before drawing the sample congregations, the advice of a board of eight "Judges," two church leaders from each state, was sought and followed.
3. In drawing the sample, the table of "Random Numbers" in the book entitled *Statistical Inference* was used.
4. In deciding how large a sample was needed to fairly represent the whole, the advice of a trained researcher, the head of the Sociology Department of Goshen College, was followed.
5. In deciding whether the sample as drawn fairly represented the whole, the opinion of the board of eight "Judges" was honored. Two church leaders from each of the four states involved in the study served as judges.
6. In testing the sample for validity and "confidence interval," a number of objective tests such as age, size, etc., were applied to both the whole and the sample to make sure that "confidence interval" of more than 90 per cent had been achieved.
7. For factual data about the congregations studied, the *Mennonite Yearbook* of 1959 was used.

8. For accuracy in the investigation of worship, a tape recording and a manuscript typed from the tape were used.
9. To test my observation impressions for objectivity, students from the course in Christian Worship observed some worship services with me using the same observation tool and their impressions were tested against mine. Eight such observations were made by students.
10. In doing the "content analysis," students from the course in Christian Worship analyzed the worship service verbatims for theological content, and by comparing their "global analysis" with my own, I tried to detect the presence of any bias.
11. To test the adequacy and accuracy of the "core Mennonite theology" which I distilled from the officially endorsed books and confessions, I submitted this to the chairman and secretary of the Committee then under appointment by General Conference to write a new Mennonite Confession of Faith. They gave their judgment that my "core Mennonite Theology" did fairly and adequately represent Mennonite belief as it is embodied in officially approved services.

VIII. Findings from the research

The hypothesis of my study was: "Mennonite worship is primarily a service of admonition, and this admonition does reinforce and underscore Mennonite Theology as this is set forth in Mennonite confessions of faith and other officially approved doctrinal statement." The findings of the investigation are summarized briefly as answers to the following seven questions.

Question No. 1. "Is Mennonite worship primarily a service of admonition . . . ?" The answer to this question is "yes." The essence of worship for Mennonites does not lie in either silence or in the ordinances, but in the spoken word of admonition or the reading of Scripture. The sermon is considered a period of instruction. Mennonite worshipers did not expect God to suddenly break upon them with a fresh revelation of His glory, rather God's will would be made clear through propositions and exhortations, chiefly in the sermon.

Question No. 2. "How well do the typical worship services of the Mennonites embody and re-enforce the official theology of the Mennonites?" The answer to this question is mixed: sometimes the worship agreed with Mennonite theology and sometimes it disagreed. Since the essence of Mennonite worship is the receiving of instruction, it is important to know what ways this instruction spoken (or sung) within worship services does re-enforce Mennonite Theology, and in what ways it does not.

Agreements Between Theology and Worship

A basic agreement exists between Mennonite Theology and worship with regard to the following ten articles of faith.

(1) *God and His Attributes:* Here Mennonite worship agrees

with its Theology but worship pictures God as a more intimate, approachable and kindly person than in the Theology.

(2) *Divine Revelation*: Here they agree, but worship added an emphasis upon the believer's inner experience of God's revelation of Himself.

(3) *God's Creation and Providence*: To a basic agreement worship added an emphasis upon God's continuing creating activity into the present moment. Worship did not raise the question of the way in which prayers affect God's providences.

(4) *Man and His Sin*: Though Mennonite worship did not speak to all the aspects of the doctrine of man and his sin, the prevailing assumptions were the same in the worshiping experiences as in the Theology.

(5) *Christ the Savior From Sin*: Again they reaffirmed each other with the exception that Mennonite worship did not explicitly mention the virgin birth of Christ. Both theology and worship disclosed a very "high" christology.

(6) *Christian baptism*: Although the services studied did not include a baptismal service or specifically mention many affirmations of Mennonite theology in this area, the underlying assumptions of baptism harmonized in Theology and worship.

(7) *Marriage and the Home*: Though in basic agreement Mennonite worship added the emphasis that the home co-operates with the church by practicing hospitality and by nurturing children.

(8) *Love and Nonresistance*: Worship supported the theology and added an emphasis that members should absorb hurts and injustices in interpersonal relationships and that nonresistant love is the truest and most effective method for evangelism.

(9) *Church and State*: Here agreement was evident, but there were so few statements on the subject it was hard to determine how complete agreement actually was.

(10) *The Oath*: Though worship agrees with Theology here, worship added the emphasis that honesty and love eliminate the causes for a lie. Christian character rather than the oath became the real guarantee of truthfulness.

Disagreements Between Theology and Worship

(1) *Salvation By Faith*: Mennonite worship contained an emphasis upon repentance as a part of the on-going experiences of the Christian, and upon the need for the Christian to seek forgiveness again and again. It cited more grounds for Christian assurance than were implied in Theology. It placed less emphasis upon the Christian's achieving perfect obedience in his discipleship, and more emphasis upon the Christian's continuing need for forgiveness for his failures. It did not make discipleship a

regulative concept by which to describe the Christian life and obedience.

(2) *The Church*: Worship (in contrast to theology) did not cite "teaching them to observe all things" as a primary task of the church, did not emphasize very strongly that the church needs to discipline her members, did not indicate that the observance of ordinances is an important factor in the life and renewal of the church, or that mutual aid is important in church life.

(3) *The Ministers of the Church*: The worship services differed drastically from the earlier sources of Mennonite Theology (1920-1945), and some emphases were different from the later sources (1946-1960). The worship services disclosed that the plural ministry is giving way to the single pastor, the nonsupported ministry to a supported, and in a few cases, the supported ministry to a salaried pastor. The call by lot is giving way to the call by majority vote. The minister as an official of the church, conscious of his own authority to rule the church, is giving way to the pastor, conscious of his responsibility to serve the church.

(4) *The Lord's Supper*: There were wide differences between worship and theology from service to service here. Theology affirmed that the Lord's Supper should kindle expectancy for Christ's return, but no service mentioned this as a function of the Lord's Supper. Theology suggested that this is an appropriate time to administer discipline in the congregation, but this wasn't developed further and one worship service opposed the idea. Theology did not affirm the Lord's Supper to be a means of grace, but in one service this very idea was stated.

(5) *Symbols of Brotherhood*: The worship services ignored the Holy Kiss entirely, both in word and practice. Different meanings were assigned in worship to the feet-washing service than in Theology. The service was said to remind Christians of the deep love which Christ had for His disciples.

(6) *The Veiling*: Worship services did not say one word about the ordinance or its meaning. However in practice, the women and girls who were members of the church all wore the veil during worship services.

(7) *Nonconformity to the World*: Worship did not emphasize the inevitable tension between the church and the world. It did not attempt to spell out specific items of approved and prohibited conduct which define Christian living as had been true in Theology. Nineteen of the twenty-one worship services omitted any mention of nonconformity in dress, and the worship services did not echo the pronouncements of Theology on worldly amusements, worldly practices in economics, etc.

(8) *Evangelism and Social Responsibility*: Theology said that the church should demonstrate within herself the solutions to the

problems of society, whereas worship urged that evangelism should be primary in the program of the church. Theology said the Christian should rebuke and in some cases separate himself from sinners, worship said try to understand, love and accept the sinner and win him to Christ. Theology had discussed whether a Christian should vote in an election or not, the worship services did not mention the matter. These are examples of the changing views toward evangelism and social responsibility.

(9) *Church Discipline*: Here there was much difference. Theology had stressed that discipline by the church was necessary because of the fallibility of the private conscience, Mennonite worship assumed that the conscience was an adequate guide to the individual. Theology assumed that discipline would be carried out by the local congregation, administered by the bishop, and that special attention would be given to congregational discipline just before the communion service. Worship services largely ignored these assumptions in their disciplinary approach. In two congregations standards of membership held before the members were the standards of a district conference. Theology had not mentioned such rules as the functioning standards for discipline.

(10) *The Final Consummation*: Worship services regarded eschatology primarily as a personal longing to meet Christ, rather than as a recital of future events as it appeared in Theology. Worship services pictured the church as the eschatological community within which foreshadowings of resurrection, judgment, and heaven are already breaking through in power, whereas Mennonite Theology stressed the resurrection and judgment as future events.

The articles of faith which are not being underscored in Mennonite worship include items which are crucial to the preservation of some unique Mennonite teachings. The fact that the church in her worship is not stressing nonconformity may have far-reaching consequences for the future of our denomination's identity. The fact that the observance of ordinances and the practice of discipline in the church is not being emphasized as taught by theology may account for important changes in the brotherhood.

Question No. 3. "Is Confession being practiced within Mennonite worship in a way consistent with the affirmations of Mennonite Theology?" The answer to this question is "no." Mennonite Theology assumed that obedient members of the church who were "keeping the all things" would not need to confess during their experience of worship. They were good enough to meet God. Furthermore, theology assumed that generalized confessions were of little value. If a believer had fallen into sin, it was a specific sin which could be named and discovered. Confessions of sin in worship

(according to Theology) were to be confessions of specific sins made by a person so as to be reinstated in fellowship.

The study revealed that generalized confessions were practiced in Mennonite worship services. Sixteen of the twenty-one worship services included such confessions. These confessions were shared by all members and were not of any specific sins. No single instance of the confession of a specific sin by an erring member as a disciplinary act was observed.

Question No. 4. Did Mennonite worship re-enforce the Anabaptist vision? Here the answer is mixed because the situations are different. Separation of church and state was a major emphasis of the Anabaptists, but this doctrine received almost no attention in Mennonite worship, perhaps because the church-state relationships are different today than then. The Anabaptists urged a literal obedience to all the "hard sayings" of Jesus, but this does not appear to be a regulative concept in Mennonite worship. Believer's baptism was a major emphasis, but this received almost no attention in Mennonite worship today perhaps because it was taken for granted. An intense brotherhood (the involvement of every member with the congregation through discipline and mutual aid) was a fourth emphasis, but this received little stress in Mennonite worship. Love for enemies was another emphasis, and this was echoed in Mennonite worship.

Question No. 5. "Did Mennonite worship re-enforce the Mennonitism of the early official sources?" (1920-1945). Here the answer is: not in many respects. The concept that "God gives grace so that the believer can obey the all things" was one dominant theme of these early sources of theology, but this was not echoed in Mennonite worship. "Full obedience means careful observances of all the ordinances" was another major emphasis, but this was absent from Mennonite worship. "Separation from the world in attire is a crucial and necessary embodiment of nonconformity to the world" was a third recurring distinctive note, but this received little attention in Mennonite worship. "Vigorous discipline, led by ordained officials, backed by conference pronouncements, and employing the sanction of closed communion" was a fourth theme, but this was weak or nonexistent in Mennonite worship.

Question No. 6. "Did Mennonite worship re-enforce the Theology of the later sources?" 1946-1960. Here the answer is "yes" (at least in part). In later official sources of Mennonite theology there is a shift in emphasis. The "good Mennonite" was no longer the person who was "keeping the all things" within the sub-culture of a semi-isolated and insulated Mennonite community. He was to be an earnest disciple, moving into the midst of a sub-Christian social system to evangelize and to bear the cross of

utter discipleship. He did not constantly speak of "avoiding the unequal yoke," but sought to be a "spiritual antibiotic," a healing agent within the arteries of a sick society.

The implied perfectionism of an earlier decade had been discontinued and the "good Mennonite" now began a discussion of the race problem with a confession of failures. His worship included a confession of sin. The emphasis concerning discipline fell upon the need for a stronger teaching program rather than upon a more rigid use of closed communion. The application of non-conformity widened to include Christian love and nonresistance in all personal relationships (not only war), and stewardship of all of life in the face of materialism and secularism.

However, the worship services disclosed no instances of a prophetic rebuke to government, and no instances of an emphasis upon stewardship of finances as an antidote for materialism.

Question No. 7. "How is Mennonite worship related to Christian work and to the worshiper's obedience to church standards during the week?" In other words, how does worship relate to life? The answer to this question is: Mennonite worship is not related closely to the specific problems the worshiper will encounter during the ensuing week as he attempts to translate his faith into life.

The average Mennonite does not look to his local congregation and its worship to help him implement his sense of world mission and social responsibility. He looks rather to the remote nation-wide organizations and institutions of his denomination. The Mennonite Central Committee is to give his "peace testimony" to government for him and be his arm of relief to the suffering of the world. The Mennonite Mutual Aid carries out his brotherly mutual aid activities. The Mission Boards decide when to start a new church in a nearby town. And so on it goes with all the major church boards and committees.

Since the implementation of so many of his convictions is being carried out for him by organizations remote from the local congregation in which he worships, the Mennonite worshiper hears little during his worship about a specific and concrete embodiment of his theology in a program of action. Mennonite services seem to presuppose that the church institutions will continue to bear the brunt of the search for the path of obedience, and that the local congregation will not become an involved, disciplining, functioning unit.

The leaders of Mennonite worship services have underscored and re-enforced the common-denominator of beliefs held by all evangelical Protestants, but have done very little to help prepare the worshiper in the local congregation spell out the implications

of his own unique faith in a life of obedient discipleship during the week.

Other findings may be noted briefly as follows. There were few borrowings from other forms of worship, and such as were noted were almost exclusively from Pietism. Little was said by which to ascertain to what extent Mennonite ordinances have become sacraments. No justification was given for the very obvious sermon centeredness of Mennonite worship. No comment was made regarding the place of the charismatic or ecstatic gifts in worship, but such gifts were not consciously present or paraded during worship. Mennonite worship was not intent upon asserting that "obedience to the Sermon on the Mount is possible now." No direct statements were made regarding the dynamic for ethical living but it was inferred that the indwelling life of Christ and the Holy Spirit provided this dynamic. No opinions were expressed as to whether worship should be primarily objective or subjective, but the choice of hymns and pronouns tended to favor the subjective. Mennonite worship included no statements about the place of the art form or the aesthetic in worship, but there were very few obvious attempts to create and express beauty in the worship service.

RESEARCH IN CROSS-CULTURAL COMMUNICATION

By Jacob A. Loewen

Tabor College

The purpose of this paper is to focus attention on the pertinent features of communication and to highlight several of the most common difficulties encountered in cross-cultural communication. My interest in the problem grows out of my missionary and Bible translation experience. Because my illustrations are almost exclusively drawn from the area of communicating the Christian message to other cultures, I have taken the liberty to add this limitation to the assigned title.

The data of this paper are presented under the following major headings: I. The structure of communication. II. Communication and the cultural matrix. III. Types of interference in cross-cultural communication.

I. The Structure of Communication

Borrowing the names from Eugene A. Nida's latest book, we label the three fundamental factors involved in communication: (1) the source (the speaker, the printed page, etc.), (2) the message (the actual form of what is being communicated), and (3) the receptor. The three are hereafter abbreviated as S, M, R, respectively. (*M and M* p. 33). [References list author and abbreviation of book or magazine. For complete reference see bibliography. All three of the components are essential, for there can be no message unless there is a source of communication, and there can be no communication unless someone receives the message. In church and mission work our consciousness of the divine origin of the message, and our experience that a messenger's life and person can detract from this divine message have often caused us to assume that the S and M are the two most important elements. For this reason we have insisted on adequate Bible training and high spiritual qualifications for messengers. But we have generally disregarded preparation concerning the receptor, as if accuracy in the "decoding" of the message by the receptor were automatically guaranteed by the spiritual fitness of the source.

Take the example of a Sunday school teacher in our own

country teaching the gospel hymn, "Gladly the Cross I'd Bear." He may feel confident that he is communicating until he finds that his "new" pupil goes home to tell his mother that they learned a new song about a cross-eyed bear named Gladly. Or as Nida points out (*M and M*, p. 34), a teacher may speak about Pontius Pilate, but his space-minded receptor thinks about Pontius, the pilot.

Consider the missionary in Mexico who haltingly delivers his first message in the native tongue, and who in his hesitation frequently adds a transitional—ah—, so common in our speech. He finds his audience becoming very frustrated by the fact that he doesn't get to say the real truth; for in this culture an —ah— after a statement means that what has preceded wasn't really true, but that the speaker will try again and say it honestly this time. (Personal communication by Wycliffe missionary in Mexico.)

Recent work in the field of human behavior also points to the fact that we must not view communication as a simple stimulus-response phenomenon. Using the operation of the high-speed digital computer as an analogy, George A. Miller, et. al., in their book, *Plans and the Structure of Human Behavior*, point out how inadequate the stimulus-response really is to describe the diversity of human responses to a given stimulus. They propose that behavior (speech or action) actually is determined by two essential features which they label as "image" and "plan." They define the image as "the internal representation, a model of the universe, a schema, a simulacrum, a cognitive map" (*Plans*, p. 7). As to the function of the image they say that we "have neglected one or more of four important characteristics of the real thing. In the first place behavior, or response, is not usually predictable from stimulation alone but is generally contingent on mediating internal states. There is much more to these internal states than the associative strengths of competing S-R links. Between stimulus and response [for our purpose—the message and the response of the recipient] there is something like . . . an image" (*Review*, p. 527).

The image corresponds to the memory section of the computer which, in the case of a translating machine, "memorizes" not only the words and meanings, but also the broader patterns of idioms, phrase structure, and sentence patterns.

The "image" of a given word will vary from person to person because of their difference of experience with the word; and it will certainly differ from culture to culture. How experience colors our image was observed by the writer in 1946 while proofreading a translation of the Church of God *Spiegel der Wahrheit*. The Church of God monitor refused to accept the word "liberal" in connection with giving, because it was a "modernistic word."

The cross-cultural difference in the image is discussed in an article by William Reyburn:

The greatest deficiency in any language learning program is the assumption that one can merely learn a language and thereby "communicate" with the speakers of that language. It is true that one can speak on a great variety of subjects and engage people in a serious exchange of words and thoughts without knowing how those thoughts reflected in the language are felt to be true or false by the people. Real communication takes place between two people when each understands the assumptions which lie behind the other's words and phrases. This is an ideal situation, but it can only be approached through an intimate acquaintance with the feeling and thought patterns of the people. This is tantamount to saying that the purpose of language learning is to be able to handle the language in order to find out what the meanings are. The meanings are not just in the English or French equivalents of the African words but, rather, in the total impression these words make on the African's thinking.

Take a simple illustration. While in the bookstore in Ebolowa with a non-Christian Bulu friend, I noticed a very attractive Negress on the cover of a French magazine. Pointing it out to my friend, I asked, *Ye w'any'e minga nyo?* 'Do you like this woman?' His rather astonished reply was, *Ye o ne ngule ya ve ma?* 'You can give her to me?' My question arose out of an American "cover girl" idea about which any number of remarks could be made. My Bulu friend responded out of a Bulu "female" concept. My question, "Do you like this woman?" stimulated a Bulu thought pattern which is sex-productivity-marriage linked in a way in which the English is perhaps only slightly linked. Consequently, my Bulu friend received my message within a framework which I was not prepared for. His reply, accompanied by a very serious and intensely interested facial expression, caused me to see that I must translate my question for myself if I were to understand it as he had. Now it said, "Do you want to have this woman?" My friend later carefully explained how such a question can occur in Bulu society. It is a question which may be asked in the preparation for marriage arrangements. It would have been better to ask whether the cover girl were pretty or not. Even so, the thought pattern of the Bulu mind will not be concerned about bust, hip, and waist, à la "Miss Universe," but of more practical thoughts of child bearing and dowry rights (PA 5:154-155).

The second component of behavior, proposed by the authors of *Plans*, deals with the alternate choices of response. These they call plans, which in their own words are defined as "a hierarchical process in the organism that can control the order in which a sequence of operations is performed" (*Review*, p. 527). The plan corresponds to the program section of the digital computer. That the plans function as a hierarchy can be demonstrated by the operations of the chess playing computer as described by Brown:

In the last few years some very remarkable simulations have been accomplished. Newell, Shaw, and Simon at the Carnegie Institute of Technology have, for instance, written a program for playing chess ["Chess-playing problems and the problem of complexity," *IBM Journal of Research and Development* 2:320-335 (1958)]. Moves are made in the service of six independent goals: (1) King safety, (2) material balance, (3) center control, (4) development, (5) King-side attack, and (6) promotion of Pawns. The order in which the goals are listed corresponds to the order in which the machine attempts to achieve them. First the machine will test for the safety of its King. If the King is not safe, the device will operate to defend the King; otherwise it will pass on to the next goal, which involves checking on the possible exchanges, to make sure that its pieces are adequately protected. If the test indicates that the pieces are not protected, then some protective move is made; if they are protected, the program turns next to center control. And so on. Associated with each of the six goals is a set of rules for generating moves relevant to that goal. When the move generator has proposed something to do, the machine must evaluate the move in terms of all six goals. There are far too many possible move proposals for the machine to be able to select the single best move from evaluations of all possible moves. The simplest choice procedure, Newell, Shaw, and Simon suggest, is to set an arbitrary acceptance level and simply make the first acceptable move. To meet the possibility that no conceivable move would meet the level set, a stop-order can be imposed causing the machine to save the best move discovered as far as it has gone and make that move if the time-limit expires.

The fact that the mechanical model achieves some of the same results as the human performance does not of course guarantee that the model works in the same way as the human performer (*Review*, p. 530).

The hierarchy of plans in terms of a response to a missionary message can be illustrated with the experience of the missionary to Africa and his wonderful convert. The native convert had all the makings of a deacon or bishop, but he had four wives. Time and again the missionary tried to encourage the man to remove this impediment. One day the native cheerfully came to proclaim that he now had only one wife. How had he disposed of the other three? He had beheaded them in the jungle. On being asked the reason why he had done the terrible thing, the man explained: "I could have given them away, but then I would have confessed my inability as a husband to manage. I could have sold them, but I loved them too much to make them slaves. I could have driven them out, but then they would have become disgraced public women. By killing them myself I saved my honor, asserted my lordship, and at the same time I saved the honor of my wives" (Oral communication by Eugene A. Nida).

Relevant communication is thus concerned not only with a

simulation of a proper response, but with the transmission of the proper "image" and the proper "plan."

II. Communication and the Cultural Matrix

Words within the Cultural Matrix. We, who have been raised in a literate world, are in danger of treating written or spoken words as real entities independent of a life situation. We assume that given a word we automatically have an "image." Goethe in his *Faust* satirizes this faulty assumption:

Mephisto:

Im ganzen haltet euch am Worte!
Dann geht Ihr durch die sichre Pforte
Zum Tempel der Gewissheit ein.

Schueler:

Doch ein Begriff muss bei dem Worte sein.

Mephisto:

Schon gut! Nur muss man sich nicht allzu aengstlich quaelen
Denn eben wo Begriffe fehlen, Da
stellt ein Wort zur rechten Zeit sich ein
Mit Worten laesst's sich trefflich streiten
Mit Worten ein System bereiten,
Am Worte laesst sich trefflich glauben
Vom Wort laesst sich kein Jota rauben.

This kind of thinking is also at the base of a letter received by the American Bible Society from a lady who asked for a dictionary of a language into which the Bible had not yet been translated. She wanted to serve the Lord and provide these people with the "Word of God."

That words are meaningful only in terms of a given way of life, was forcefully driven home to me in my early linguistic field experience. I had just recorded the names of a number of visible objects and decided to chart some verb forms. I began with the verb "to run" and asked: "How do you say 'I run'?" The Indian was quiet for a few moments and then swiftly uttered a speech which, if written, would have spread several times across the page. I started to write it, but bogged down. Three times I had him repeat, each time I started to write, but gave up. When I then almost reproachfully said: "But this cannot mean only 'I run,'" the Indian said: "Of course not. It means 'I saw a deer, I grabbed my spear and am now running after it.'" Then almost philosophically he added: "Only a fool would run for nothing."

The Stereoscopic View. Dr. Kenneth L. Pike in *Language and Life*, a reprint of a series of lectures given in a Dallas Seminary, refers to our culture as providing a stereoscopic grid through which we hear a foreign language or through which we perceive new customs, ideas, and philosophies. The grid emphasizes that we tend to cut observed reality into fragments, the size and shape

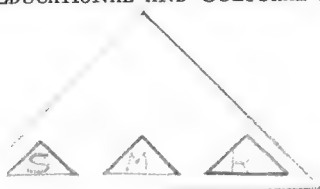
of which are determined by our culture. For a Waunana Indian the color spectrum has many less colors than for us. He sees: yellow, k'oara (orange-red), p'awara (green-blue). Our darkest blue (navy) he sees as black. Thus while an American and a Waunana may see the same range of colors they divide them quite differently. Any difference from our own view will at first blush always seem wrong or at least, comical. Gellert had this idea in mind in his poem: Im Lande der Hinkenden.

Vor Zeiten gab's ein kleines Land,
 Worin man keinen Menschen fand,
 Der nicht gestottert, wenn er red'te,
 Nicht, wenn er ging, gehinket haette;
 Denn beides hielt man fuer galant.
 Ein Fremder sah den Uebelstand.
 Hier, dacht' er, wird man dich im Gehn bewundern muessen,
 Und ging einher mit steifen Fuessen.
 Er ging, ein jeder sah ihn an,
 Und alle lachten, die ihn sahn,
 Und jeder blieb vor Lachen stehen
 Und schrie: "Lehrt doch den Fremden gehen!"
 Der Fremde hielt's fuer seine Pflicht,
 Den Vorwurf von sich abzulehnen.
 "Ihr," rief er, "hinkt; ich aber nicht:
 Den Gang muesst Ihr euch abgewoehnen;"
 Das Laermen wird noch mehr vermehrt,
 Da man den Fremden sprechen hoert.
 Er stammelt nicht; genug zur Schande!
 Man spottet sein im ganzen Lande.

Gewohnheit macht den Fehler schoen,
 Den wir von Jugend auf gesehn.
 Vergebens wird's ein Kluger wagen,
 Und dass wir toericht sind, uns sagen.
 Wir selber halten ihn dafuer,
 Bloss, weil er klueger ist als wir.

My wife and I observed this stereoscopic viewing (both by ourselves and by the natives) quite frequently during our missionary experience. One day my wife put our wedding picture on the dresser. The girl who helped her in the home burst out in sheer surprise: "I never knew you were married!" Her criteria for this conclusion were based on the existing pattern of her village. There were no married couples who were living together. Only couples living in common law arrangement had "mutual respect." Our mutual respect, lack of quarrels, and the absence of husband domination had convinced her that we were living in a common law arrangement.

Culture Shaping Communication. If we now refer again to the three elements of a communications structure—S, M, R—we must say that all three of them will be "shaped" by the stereoscopic view of the culture from which they come. Nida illustrates this in the following diagram.



This is to say that the speaker's worldview is shaped by his culture, his message is framed in the forms of his language and culture, and the receptor decodes the message in terms of the culture.

A modern missionary communicating the message of the gospel is thus involved in a tri-language model of communication.



The difference in total shape is an attempt to symbolize basic differences between cultures, and the difference of level is to show their temporal difference. We could thus label the triangle as representing our culture, and the circle the target culture of missionary work. The message in Bible times differs in outward form from M of our day in terms of words, grammar, and etc. It will be a temptation to take M and to plant it into (M), however, this is not communication. Real communication requires the M to be translated into M before it will be relevant in the target culture (*M and M* pp. 36-39).

An example could be the translation of the Great Commandment into Waunana: "Thou shalt love the Lord, thy God, with all thy *heart*," must be translated as: "Thou shalt love the Lord, thy God, with all thy *spleen*," because the latter, and not the former,

is the seat of the emotions for the Waunana. We experience a similar problem when we attempt to take the Greek idiom "bowels of mercies" from Bible times literally into modern English.

This would mean that the translator is responsible for functional rather than formal equivalence. Nida quotes the translation of Matthew 7:15, "I send you as sheep among leopards" instead of "among wolves," even though the jackel of that country is a much closer biological equivalent of the wolf than the leopard. But the leopard is a functional equivalent (*M and M*, p. 190).

The Covert Worldview. We also need to point out that the cultural matrix not only involves the overt culture patterns, but also the covert and unspoken value systems or *Weltanschauung*. The conflict between our western worldview and that of folk societies is well described by Reyburn:

Modern man inherited from Greek culture a way of viewing the world in which uniform order is assumed and sought out. What is not scientific is usually admitted and there is little attempt to placate, cajole, and appeal to nature. Rather, modern man controls nature insofar as he can by employing natural laws to do so. Moderns are the heirs of two vast changes in cultural history. The first is the separation of God from the rest of nature which the Hebrews gave us, and the second is the Greek gift of separating out order in nature as immanent without any reference to God or the gods. These two historical developments, in which folk societies do not share, serve to drive the deepest imaginable wedge between the thought of a twentieth-century missionary and the people of his folk congregation.

A simple illustration is the case of the bush fire hunts in Africa. At the end of a strenuous day's hunt behind leaping walls of flaming grass fires the hunter may wearily trudge home with nothing in his hands but his smoke-stained spears. To the missionary it is obviously the case that the animals escaped or that there were none in the area. To the African there is a reason that goes deeper. Something went wrong with the procedure which is carefully executed in order to assure the kill. The procedure is partly in taboos kept by women. If a woman has been talking noisily in her compound instead of sitting quietly in the house, she is at fault and will be punished. Perhaps a careless wife has swept the floor of her house. She has thereby caused the animals for miles away to flee. This is due to no lack of logic but rather to the assumption that the spirits of dead animals must not be aroused during the hunt. The relatedness is vividly assumed to exist. . . .

The contact of modern missionaries with the folk world introduces the latter to the presuppositions of a modern age. However, these assumptions are such a subtle force within the ethos of the missionary that they seldom come in for discussion. When a missionary learns the language of a tribesman and speaks with him, his point of contact is the language, but often not the thought concealed in the meanings which the words have for the folk man. The mission-

ary's view of the world is quite ordered. The physical and the metaphysical are rather well separated. The folk man operates upon the assumption that the two are integrally related and interacting. The modern partakes in a recorded history, the folk man in an unrecorded mythological past. It is impossible for a twentieth-century missionary to live a single day in his work-a-day routine without exposing the assumptions upon which his thought forms are based. Whether it be his preaching, teaching, or his silent living, he does so within the framework of ideas which are strange and largely unknown to the folk world. It is because of this that the missionary, no matter how he may endeavour to hide his western material culture, can never hide his long ontological inheritance (PA 5:140-145).

We experienced a similar conflict in the unspoken premises of our worldview in our translation work in Hillsboro last summer with Aureliano Sabúgara, a Chocó Indian from Panama. I quote the experience as told in "Bible Translating in Hillsboro, U.S.A." soon to appear in PA.:

Already when we checked the translation of the expression "to the end of the earth" from the Great Commission, we had felt that there was something amiss with the Chocó translation, but found no way to isolate the problem. For this reason when we began to translate the book of Acts and came to verse eight of chapter one, we carefully explained the concept of world evangelism as a background for a translation of "unto the uttermost part of the world." Again, he translated, "to the last earth." This time we read the Spanish source again and pointed out, "You translated wrong, it is to the 'orilla' [Spanish edge] of the earth, not to the *last earth*." He countered with, "Your explanation, however, said *all the people*. What about those beyond this 'orilla'? Aren't there seven seas?" "Well," I allowed, "we generally speak of five oceans but you can divide them into seven or more if you like." As our conversation progressed it was very obvious that we were talking past each other. But what was wrong?

On a sudden inspiration I went to the geography room and wheeled a large globe into my study. I pointed out Panama, the United States, and the route of Aureliano's travels. Next, I pointed out the five oceans and also traced the course of the destructive tidal wave that struck far-off Japan after the earthquake in Chile. He was dumbfounded, constantly looking at and turning the globe. My attempt to continue our work failed. He was too deeply engrossed. I began re-writing some of the translated verses, but he continued as if glued to the globe.

Finally he said, "So the earth is not land, but one big ocean and many islands." I countered, "No, you see these different shades of blue in the ocean; they indicate depth. Under the water is a 'land' bottom, so the earth is still land with big oceans." He continued his contemplation for a while, then suddenly he arose, went to the blackboard, and drew a sketch, saying: "I knew the world was *round*, and I always thought that in the center of the world were Panama

and the United States. Around this round land, I thought there was a 'ring' of water which was the first sea. Then followed successive rings of land and water until there were seven seas and seven lands; and the last one is frozen to the sky, so what you wanted me to translate just does not make sense. On the last earth there are no people, it is too cold.

We could summarize the burden of this section saying that a missionary's task in cross-cultural communication involves first of all, a firm grasp of the "image" and the "plans" of God's truth within his own culture. Next he needs an adequate knowledge of the cultural "grid," seen and unseen, of the would be receptor. And third, he needs the ability to "encode" the message ("image and plans") into terms relevant in the receptor's culture, so that the latter will receive a total communication of God's truth.

III. Interference Factors in Cross-cultural Communication

Before we go into cross-cultural interference factors, we may do well to remind ourselves of intra-cultural interference. First, the "same word" may carry a very different meaning to different people due to their difference of their experience. Nida states that "apple" for him carries special overtones of grandfather, because that is where he got the best apples in his experience (*M and M*, p. 89).

Next, we need to remember that no two words are exact synonyms. Thus "peace" and "tranquility" may be termed synonyms, but compare a "peace conference" with a "tranquility conference."

It is estimated by Martin Joos that even among the most literate and well informed rarely is there more than eighty per cent communication. Nida adds (*M and M*, p. 76) that in an ordinary church service with people of differing backgrounds, there is less than fifty per cent communication. A recent University of Washington study fixed the amount of communication at the U.N. between ten and fifteen per cent. Here is what Peter T. White, a journalist, writes on this score:

Loss of a truly international diplomatic language may have subtly affected the thinking of many diplomats. Symptomatic is this fragment from a Security Council debate which, linguists, say couldn't have been improved upon from the interpreter's point of view [sic.]. Apropos of an item on the agenda, an Australian, speaking English, says, 'I assume.' As translated for the president of the council, a Belgian speaking French, this becomes 'I deduce.' The Russian gets it as 'I consider.' . . .

After isolating twenty similar instances at the same meeting Mr. Glenn notes that 'the purely linguistic problem was solved superbly, but the degree of communication between the Russian and English speaking delegates appears to be nil' (*The New York Times Magazine*, Nov. 5, 1955, pp. 32-33).

On a cross-cultural level the interference factors, following Robert Lado, involve: (1) same form, different meaning; (2) same meaning, different form; (3) same form, same meaning, different distribution (*Linguistics*, p. 114 ff.). We could illustrate each of them as follows:

1. Same form, different meaning. Lado uses the U. S. and Latin American interpretation of the bullfight as an example (*Linguistics*, pp. 114-117). Nida refers to the eight-spoke wheel which to the Buddhist symbolizes "a reversion of type," the eternal cyclical view of the world, which denies any ultimate progress, but which to an American is a perfectly "logical" and appropriate symbol of progress (*M and M*, p. 2).

On the cross-cultural level this could involve a transfer of form without the proper meaning. In terms of the *Plans* approach, we could say it involves a simulation of the plan without the proper image and without the true hierarchy of plans. Reyburn provides an example of the latter in his description of the change from polygyny to monogamy under pressure of the colonial government and mission doctrine. Monogamy was accepted but without a true appreciation.

This discouragement of polygyny as bad does not by any means imply that when polygyny is given up the deep sense of responsibility often found in it will come forth as a distilled bit of residue. This was demonstrated to me rather forcibly recently when I asked a group of Kaka Christian adults what they would do if their older non-Christian brothers were to die and leave them their wives. Their replies, without exception, shook off the very thought of responsibility. "We would sell the women and get the money for ourselves." This they would have the right to do within the culture they claim when it will bring them acceptable rewards. The moral responsibility partially required by the polygynous inheritance is refused for quick personal gain (*PA* 4:239).

2. Same meaning, different form. Lado illustrates this with a young man from Izfahan, Iran, who

gets off the train in a small town of the United States. He claims his baggage and attempts to hail a taxi. A likely car with a white license plate and black letters goes by. The young man waves at it. The car does not stop. Another car appears with the same type of license plate. The young man waves again, without success. Frustrated because in the United States taxis will not stop for him, he picks up his suitcases and walks to his destination. He later finds out that taxis in the United States are distinguished not by a white license plate, but by bright flashing lights and loud colors. In Izfahan at that time the signal for a taxi was a white license plate. This was an intelligent university-level student stumbling over a predictable type of problem (*Linguistics*, pp. 118-119).

India gives our idiom of "the hard-hearted man" in Shipibo of Peru as "a man without holes in his ears" (*M and M*, p. 2).

3. Same form, same meaning, different distribution. Lado cites the difference in use of sugar as an example.

For some time it was puzzling to me that on the one hand Latin American students complained that North American meals abused the use of sugar, while on the other hand the dietitians complained that Latin Americans used too much sugar at meals. How could these seemingly contradictory opinions be true at the same time? We can observe that the average Latin American student takes more sugar in his coffee than do North Americans. He is not used to drinking milk at meals, but when milk is served he sometimes likes to put sugar in it. The dietitian notices this use of sugar in situations in which North Americans would use less or none at all. The dietitian notices also that sugar bowls at tables where Latin Americans sit have to be filled more often than at other tables. She therefore feels quite confident in making her generalization.

The Latin American student for his part finds a salad made of sweet gelatin, or half a canned pear on a lettuce leaf. Sweet salad! He may see beans for lunch—a treat! He sits at the table, all smiles (I have watched the process), takes a good spoonful and, sweet beans! They are Boston baked beans. Turkey is served on Thanksgiving Day, but when the Latin American tastes the sauce, he finds that it is sweet—it is cranberry sauce. Sweet sauce for broiled turkey! That is the limit—these North Americans obviously use too much sugar in their food. And whatever secondary means are attached to too much sugar in a person's diet tend to be attached to the people of the country who prepare and eat such meals (*Linguistics*, pp. 119-120).

The difference in distribution often involves the differences of connotation. Thus in some parts of Mexico a woman is never referred to by the pronoun "she," since the absence of a proper name or a title like "señora" or "doña" indicates a public woman.

4. Several other factors must be mentioned. Where S does not translate M into a form intelligible for R of another culture to interpret, R is forced to reinterpret M in terms of his own grid. This type of *restructuring* is seen in the example cited by Reyburn:

The sacrament of communion is also restructured by the village Kaka to fit into previously made assumptions. Missionaries in the Kaka area have often remarked that the communion may strike the people as a kind of magic, and of this there is no doubt. However, this does not appear to be the real reason why the communion Sunday is the only one which is attended in force. It should be noted that the mission plays a sort of police role between *Najambie* (God) and the people. Failure to pay one's weekly pledge, to attend the services, or to keep the mission laws concerning adultery, stealing, or killing are faults for which the offender is severed from the mission and therefore from *Najambie*.

In Kaka culture, when a grave offense has been committed, one goes to his older brother who prepares food with the offended party and these two eat this food in a purification rite which dissolves the enmity between both parties. Usually it is the eating of two chickens. The restructuring of the communion appears to be associated with this ceremonial eating which is called *sataka*. The mission session judges the faults of the baptized members and refuses communion to those who are believed to be guilty of some church violation. However, the missionary and catechist cannot possibly know the extent of these violations. For those who are allowed to take communion the meaning is that of *sataka* "removing the sin." Interestingly enough, if a church member is removed for a violation, there will often be another kin who will take communion and thereby "remove the sin" in a way analogous to the pagan *sataka* (PA 5:80-81).

Another factor is *syncretism*. This involves the mixing of new elements with the old. No new concept can, of course, be introduced without modifying the existing pattern. What is dangerous is if new forms are added to the old without the proper "image" and "plan." William Madsen in his book *Christopaganism* discusses the renaming of Mexican deities with names of Catholic saints, a case of flagrant syncretism. This syncretism by Jesuit priests had the official papal sanction of Gregory VII when he wrote to the priests working among heathen Britons: "We must refrain from destroying the temples of the idols. It is necessary only to destroy the idols, and to sprinkle holy water in these same temples, to build ourselves altars and place holy relics therein. . . . You should allow them as in the past, to build structures of foliage around these churches. They shall bring to the churches their animals and kill them, no longer as an offering to the devil, but for Christian banquets in the name and honor of God" (Duignan, AA 6:725-732).

I conclude with a quotation from William Reyrburn: "Witnessing to the eternal Word of God through the channels of a network enmeshed in a strange language and unfamiliar patterns of thought provides the oldest and still the greatest of all missionary challenges" (PA 5:178).

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THE MEANING OF THE MISSION OF MENNONITES ON THE NEW FRONTIERS

By Paul Peachey

I have been given the task to exegete a topic handed to me, rather than to report on some exciting and convincing new research. It has been titillating to muse on the fact that a committee of supposedly good Mennonite Republicans should have come up with the slogan that elected a new Democratic president before the term had become a household word in our country.

The frontier, both as a concept and as a fact, has played a key role in the history of our civilization. It is a term that always and at once points in two directions—*inwardly* toward the rampart, the region of harmony, and *outwardly*, toward the hostile, the undeveloped wilderness. Historically our life has always flowed within limits, behind a frontier. Perhaps the most colorful and best-known one was the *limes* of the Roman empire, the long line of military outposts running through the heart of Europe, separating the high Latin civilization from the marauding tribes of northern and eastern Europe.

But somehow, the frontier has been crucial to the forward surge of history. Repeatedly there has been decline within the area contained by the frontier coupled with mounting prestige without, as the raw material of history there unfolds its unexpected energy. Eventually the center of destiny shifts beyond the frontier into the wilderness, and the barbarians become the heirs of the next chapter of history.

Now the committee, in selecting this topic displayed, let us hope, some sound Mennonite instinct; i. e., first an awareness that we are living in a time when there seem to be many shifts from the inner ramparts to the outer wilderness, and secondly, a recognition that somehow the "Mennonite destiny" (if there is such a thing) is bound up with frontier reality.

In a sense, of course, this topic raises the age-old question of a Mennonite *raison d'etre*, a reason for Mennonites being Mennonites and behind this, just what is Mennonite. Indeed, the question arose the moment the first assembly was formed. In recent years we have received much help in answering this perplexing question by trying to retrace the steps and to rephrase the words of those who created those assemblies. And yet, anyone who at-

tempts this. Soon discovers that a deep gulf separates him from those pioneers. For these doughty frontiersmen of the Alps and the North Sea trafficked quite immediately in questions of life and death. Today we can reduplicate them but without such stern consequence. Indeed, we have been given, in this fair land of ours, not only unprecedented freedom and amplitude for the pursuit of our life, but today, the power structures of this age which, on the frontiers put our forebears to death, stand ready to subsidize our institutions. And we cannot escape the piercing question: can one assume that the world has moved so much closer to the truth or have Mennonites retired from the frontier?

This question I cannot presume to answer tonight. There is one facet, however, that I believe we can examine with profit. Separating us from the sixteenth century Anabaptist frontiersmen is the *ethnic phase* of our history, that phase during which Anabaptism as a spiritual movement was transmuted into an ethnic deposit. Perhaps this is merely the historical irony which overtakes all movements. In any case, Anabaptism was destined to re-enact, in partly modified and partly disguised form, the fate of the *corpus christianum* which it arose to correct. And because of the ethnic deposit which rests on all of us we recover neither the faith nor the social outlook of the original frontiersmen.

Now it is only fair to stress that our history has been one of continuous, and at times quite conscious, struggle with the ethnic problem, the inertia of traditionalism. The first martyrology, culminating in the Martyr's' Mirror of 1660, was essentially an attempt to rekindle the pristine fires. Already at that early age there was evidence of lassitude, of believers being content to move effortlessly forward in the weakening wake of others who had gone before. Revival has accordingly been a recurrent theme in Mennonite writing and preaching. It is to be doubted, however, whether there was ever a sufficiently clear recognition that the spiritual withdrawal of Anabaptists from the "world," and the "world's" reciprocal expulsion of Anabaptists from its bosom, over the generations led to an ethnic segregation of Mennonites from the biological and cultural nation of which they were originally a part.

The ethnicizing of what was by definition a spiritual community, however, was consummated for the most part only where mass migration into a different cultural and linguistic "world" occurred, above all in Russia and America. Whatever the Mennonites in Russia may have thought about the matter, it is clear that American Mennonites have never come to terms with this fact, and it is my thesis here tonight that until we do so we shall be unable to determine our mission on the new frontiers.

Significantly, it has taken a Catholic sociologist to identify and

exhibit the full dimensions of the ethnic character of Mennonite existence. I refer to E. K. Francis' study of the Mennonites in Manitoba (*In Search of Utopia*, Glencoe: Free Press, 1955). Perhaps I may be permitted to summarize and interpret his study in this simple postulate: The more nearly Anabaptist urge to separate from the world, and the world's urge to expel the Anabaptists, is realized, the more nearly the Anabaptists' genius is transmuted into something other than a spiritual movement, which is to say, it is destroyed. What began as a spiritually selective and pulsating community ends as an inclusive natural society. And what was elsewhere only a strong tendency is finalized by migration. Isolated now by an almost total cultural discontinuity, the "church" becomes a nation. Perhaps never does the spiritual fire die completely, but it is no longer the primary reality of the common life.

In the American setting, particularly among the Mennonites and Amish of Swiss descent, whom I know best, the ethnicizing of life and then the subsequent attempt to retain its continuity, has been the central fact of our history. Unfortunately, however, our theological framework, the church-world antithesis, obscured for us, often almost totally, the nature of the problem. Now the church-world antithesis is a Biblical reality, and is moreover, perhaps, the most distinguishing mark of the Anabaptist genius. But the tensions of six generations of American Mennonites were to a considerable extent the psychological tensions of a foreign-language cultural minority, tensions shared by millions of other immigrants—Germans, Poles, Italians, Scandinavians and others. And while all this time there were also ample points of genuine Christian tension, for Mennonites these were often obscured and our energies were consumed, by psychological and cultural tensions upon which we placed theological definitions. To this day we use the term "Mennonite church" indiscriminately and interchangeably for what is really the Mennonite "nation." If all this may have been inevitable, the real tragedy is that as the pressures of American life have eroded our ethnic substance our efforts too often went in the direction of social and psychological surrogates rather than toward frontier faith.

Now much could have been learned, and can still be learned today, from the experience of other ethnic groups in their struggle to find their way into American life and yet retain the values of their own culture. What is long overdue is a correlation of the Mennonite experience with the problems of assimilation experienced by other groups. To this day the problem of the American Jews bears marked similarity to the position of Mennonites in American life. Some of the Scandinavians, likewise particularly the Norwegians, had a great deal of difficulty as immigrated groups. Out of their experience, e. g., came the formulation of (Marcus)

Hansen's third generation "law": "What the son wishes to forget, the grandson wishes to remember." (*The Problem of the Third Generation Immigrant*, Rock Island: Augustana Historical Society 1938). This thesis was magnificently (though perhaps a bit extravagantly) elaborated by Will Herberg (*Protestant, Catholic and Jew*) Garden City: Doubleday & Co., 1955). Herberg maintains that in the "melting pot" encounter of American history there emerged in the immigrant groups first the full development of ethnic self-consciousness, but that as the ethnic substance was dissolved in the process of assimilation it was eventually reduced and transmuted into religious affiliation. The so-called religious revival of the past two decades has been essentially the post-ethnic search for personal identity in an impersonal, rootless society. To be of German or Polish or Italian descent generally no longer provides an answer to the question: Who am I? That question is now answered by *Protestant, Catholic or Jew*.

Now you are ready, I am sure, with the habitual answers that we give at this point. It is inevitable, we say, that the Christian faith must give rise to cultural forms. Indeed, this, too, belongs to the Anabaptist genius. The church is visible and not merely the Platonic ideal of the Reformers. Furthermore, ethnic cohesion is likewise an authentic dimension of human existence. One might thus invoke both the doctrine of grace and of creation at this point.

But my argument tonight is not a denial of these basic and self-evident facts. What I do say, however, is that in our history there has been the failure to distinguish spiritual from ethnic realities, precisely because they tend to fuse in our experience. And the more hazy the distinction, the more likely that we substitute the ethnic for the spiritual, indeed that we attribute spiritual meaning to what is merely ethnic. The God of nature and the God of grace, to use the traditional theological distinction, is one God, and it may be doubted seriously whether we can ever distinguish His several ways of working in absolute terms. But there is a fundamental distinction which must always be grasped clearly: grace is the realm where men respond in spiritual encounter and freedom to God, thereby determining their own destiny beyond the confines of nature. Anabaptism by definition is a reaffirmation of the Gospel message that the community of faith can never be coterminous with the community of nature. The fight for ethnic survival is the betrayal, not the survival, of the Anabaptist cause.

Perhaps one footnote must be inserted here. The ways of God are not our ways. When the first vessel on the potter's wheel goes awry, the potter can start afresh. In another context we may do well to contemplate the fact that despite the Anabaptist

Fehlentwicklung (misdevelopment), God in His mercy may have used the ethnic deposit as a shelter for a hibernating vision. But if so, and it is by no means as certain as we Anabaptist scholars sometimes think, the fact belongs to the mysteries of divine grace and not to the realm of human strategy. That is, we cannot go forward with the promotion of ethnic Mennonitism, with the hope that an alchemist may sometime transform it all into spiritual reality.

II

What I am trying to say rather inadequately may become a bit more clear when we address ourselves to the new frontiers of which the committee spoke in making this assignment. The inward look, in which we have just engaged, has its own difficulties. But it deals nonetheless with historical concretions. Time and space are here truly interrelated. The inward look is inevitably a look into the past. But when we turn our eyes to the exterior, to the wilderness, we really turn to the future. To our former problems of assessment is added a problem of another order, namely the unrealized and hence the unknown. I want to avoid the folly of seeking to sketch the unknown in the terms that are possible when we look at the past.

Tonight, however, we have been asked to mount the ramparts of our frontier and look into the unformed wilderness of the future. All we can do is to report to each other the images suggested to us by the indefinite forms which lurk in distant mists. I should like to report two such images, such impressions, tonight. The first is that there seems to be taking form in the wilderness beyond our frontier a new *this-worldly* global civilization. This civilization is one in which science and technology have brought within historic possibility the vision of the good life which heretofore has been merely the theme of poetic Utopias without real-life links to history. Writing some ten years ago, Arnold J. Toynbee, the British historian-philosopher stated, "My own guess is that our age will be remembered chiefly neither for its horrifying crimes nor for its astonishing inventions, but for its having been the first age since the dawn of civilization some five or six thousand years back in which people dared to think it practicable to make the benefits of civilization available for the whole human race." This vision, he continues, has been made possible by "our new invention of applying mechanical power to technology; for this sudden vast enhancement of man's ability to make non-human nature produce what man requires from her has, for the first time in history, made the ideal of welfare for all a practical objective instead of a utopian dream" (*New York Times*, Oct. 21, 1951).

Now if I mistake not, the cumulative power of science and technology and of the accompanying economic and political changes, have all but usurped the (institutional) church from her role as preceptress and harbinger of civilization. The hardest secular mind to be found in the world today may well be the haughty and skeptical Asian, proud and confident in his new-found techno-scientific power, scornful of the past eras dominated by religious "superstitions" and institutions. Christianity, overlaid as it is with the self-betrayal of divisions, of espousal of war and nationalism, of identification with the state structures of societies now overtaken by the momentum of history, fares no better than the others. Whether it is Japan, China, or India, the new societies are proudly man-made and empirical. Only the inertia of massive traditions, shelters—and deceives—us in America from a similar lot.

The impact of this for our own life may be accentuated in the long run by what a lofty Asian intellectual terms "the end of the Vasco da Gama era of human history" (K. M. Panikkar, *Asia and Western Dominance*, London: George Allen and Unwin, 1953). By this he means the end of that epoch, if I may so say, in which history revealed about the plans and the wishes of the peoples of the tiny Western fringes of the Eurasian continent. The course of empire for many decades appeared also as the course of Christendom, indeed, in the mind of perhaps most Europeans (and Americans), the course of the kingdom of God. Just what new hubs will emerge, and what all this will mean for the lands of "Christendom," we do not know. But this much seems quite clear. The kingdom of God, or more properly speaking, the response of the Christian community on earth to the kingdom, must now, or now has the privilege to do so, make its way without the accustomed berth provided by sword and pound or dollar.

The emergence of powerful and unprecedented new forces in the wilderness and the consequent shift of the center of gravity from the ramparts of Christendom to strange new this-worldly constellations makes ours truly a frontier time. As such, it is a time of profound danger and promise; danger, not merely because of the external sorrows these upheavals will surely bring, indeed, have already done so; but dangerous, above all, spiritually. Albert Salamon, a New York sociologist, states that "the key intellectual and social values of the Western world take their origin and power from the messianic vision" (Commentary, VIII, p. 599). The reduction of the higher values which have informed our civilization by goals and fulfillments that are this-worldly bids fair to turn the gold of our new utopia suddenly and with incalculable shock into mere dross and dust.

But as the danger mounts, so does the promise, or at least the

possibility. Salamon points to George Lakacz, the Hungarian intellectual turned communist, indeed one of the remarkable figures of this century, though perhaps of little "historical" note. In seeking to plumb the predicament of modern man, Lakacz concluded that until the socialist revolution is over, men will never be able to experience the radical despair which is the prelude to their salvation. "Only when the perfect social machine has been actualized, housed, clothed, fed, and still find themselves lost, wretched, and unredeemed, only then—in the depth of their disillusionment—will they perceive that technology is unable to save, and will they be forced into genuine spirituality" (Salamon, *ibid.*, p. 60). And so Lakacz joined the revolution in order to hasten the crisis. A modern John the Baptist?

Next to the emergence in the wilderness of a new this-worldly civilization, I see in distant mist the possibility that the present form of the church as a social institution may come to a radical end. The keel of the Western church, as we all know, was laid down at a time when the church acquired access to the sources of wealth and even of political power. As the creator of Europe, Christianity was in turn sheltered by the civilization which it engendered. While in America, the pluralistic ethnic origin of the population gave rise to a unique separation of church and state, here as in Europe, Christianity and the church were accorded a favored place at the national hearth.

Unfortunately, as history now rushes past us, the impulse of the Christian community is not the burst of faith which senses the purposes of God in the shift from rampart to wilderness but the reflex of fear. The test of orthodoxy today is really the willingness of the Christian adherent to trigger the ultimate weapon in defence of Christendom's brief moment of glory on the grandstand of history. Perhaps, then, Toynbee is right in his verdict: "It looks as though it were uncommon for creative responses to two or more successive challenges in the history of a civilization to be achieved by one and the same minority. Indeed, the party that has distinguished itself in dealing with one challenge is apt to fail conspicuously in attempting to deal with the next . . ." (*A Study of History*, Somervell Abridgement, Vol. I, p. 307). Success, it appears, leads to the "idolization" of an "ephemeral self." The outworkings of valiant faith in the structures of history become themselves the objects of devotion and veneration. The faith itself, the obedient but costly and hazardous response of men to God in His mighty acts, is bypassed, indeed, it is hardly surmised.

The import of reflections as these for us Mennonites, even if correct in only a small measure, is overwhelming. The creative burst in twentieth century American Mennonite life, which has

meant genuine salvation for many, has nonetheless consisted fundamentally of the excited rush to build those temporal structures which earlier ages denied us, those which others had built before us, but which history is already bypassing and leaving behind. Can it be that we, the heirs of a movement which bled for the affirmation that the Christian faith postulates by definition a frontier ever moving into the unredeemed wilderness, are to be found at this crucial time of revolution deep in the ramparts, furbishing the dwellings we must leave tonight or tomorrow? To be sure, it would be both inaccurate and ungrateful if I were to fail to acknowledge some of the good things, some of the frontiersmanship, that God has permitted in our ranks today. This is not a time for despair or for dejection that the glory is departed. But it will be disastrous for us all if these deeds of mercy blind us to the cues of our time. Whether or not we acknowledge Hans Denk as a typical Anabaptist, his well-known dictum remains a clarion definition of the meaning of the mission of Mennonites at the frontier of history: *No man can know Christ except he follow him, except he follow him in life.* This, oversimplified as it may seem, is nonetheless the central frontier strategy of every age. To follow Christ outside the camp, outside the frontier, is the call of this and every hour.

The demand of this hour is not the question: can we Mennonites *too* build colleges, seminaries, publishing houses, journals, institutions of church expansion, etc., etc. I am haunted rather by the possibility that the sobering scene before the temple described by the Synoptics might be a more nearly correct characterization of our situation: ". . . One of his disciples said to him, 'Look, Teacher, what wonderful stones and what wonderful buildings!' and Jesus said to him, 'Do you see these great buildings? There will not be left here one great stone upon another, that will not be thrown down.'" (Mark 13:1f)

REGISTER OF ATTENDANCE**Thirteenth Cultural Conference—June 8-9, 1961**

1. Bender, Paul, Hesston College, Hesston, Kansas
2. Bender, Mrs. Paul, Hesston, Kansas
3. Bixel, Ruth, Tabor College, Hillsboro, Kansas
4. Boese, Mrs. Henry
5. Byler, Clayton, Hesston College, Hesston, Kansas
6. Byler, Mrs. Clayton, Hesston, Kansas
7. Carlson, Robert, North Newton, Kansas
8. Carlson, Mrs. Robert, North Newton, Kansas
9. Classen, George L., Hillsboro, Kansas
10. Conrad, Willard, Hesston College, Hesston, Kansas
11. Driedger, Leo, 722 Main Street, Newton, Kansas
12. Dyck, Cornelius J., Mennonite Biblical Seminary, Elkhart, Ind.
13. Ebel, A. R., Tabor College, Hillsboro, Kansas
14. Ebel, Mrs. A. R., Hillsboro, Kansas
15. Ediger, Elmer, Prairie View Hospital, Newton, Kansas
16. Eigsti, Mahlon, Hesston, Kansas
17. Eigsti, Mrs. Mahlon, Hesston, Kansas
18. Ewert, Alden, Tabor College, Hillsboro, Kansas
19. Ewert, John H., Freeman Junior College, Freeman, South Dak.
20. Ewert, John L., Tabor College, Hillsboro, Kansas
21. Franz, Leonard J., Tabor College, Hillsboro, Kansas
22. Franz, Mrs. Leonard J., Hillsboro, Kansas
23. Fretz, J. Winfield, Bethel College, North Newton, Kansas
24. Fretz, Mrs. J. Winfield, North Newton, Kansas
25. Friesen, Gerhard, Newton, Kansas
26. Friesen, Paul, Hesston, Kansas
27. Funk, P. J., Hillsboro, Kansas
28. Gingerich, Melvin, Goshen College, Goshen, Indiana
29. Goossen, Henry, Johannesthal Church, Hillsboro, Kansas
30. Graber, Eldon, Bethel College, North Newton, Kansas
31. Graber, Mrs. Eldon, North Newton, Kansas
32. Harder, Leland, Mennoite Biblical Seminary, Elkhart, Indiana
33. Harder, M. S., Bethel College, North Newton, Kansas
34. Hart, Lawrence
35. Heidebrecht, John, Tabor College, Hillsboro, Kansas
36. Hein, Marvin, Mennonite Brethren Church, Hillsboro, Kansas
37. Hertzler, Silas, Tabor College, Hillsboro, Kansas
38. Hertzler, Mrs. Silas, Hillsboro, Kansas
39. Hiebert, Erwin, Madison, Wisconsin
40. Hiebert, Mrs. Erwin, Madison, Wisconsin
41. Hiebert, Lando, Tabor College, Hillsboro, Kansas
42. Hiebert, P. C., Hillsboro, Kansas

43. Holsinger, Justus, Bethel College, North Newton, Kansas
44. Janzen, A. E., Tabor College, Hillsboro, Kansas
45. Janzen, John, Newton, Kansas
46. Janzen, Paul, Hillsboro, Kansas
47. Kauffman, Dan, Hesston College, Hesston, Kansas
48. Kauffman, Howard, Goshen College, Goshen, Indiana
49. Kauffman, Melva, Hesston College, Hesston, Kansas
50. Kaufman, Ed G., Bethel College, North Newton, Kansas
51. Kliewer, Mary, Tabor College, Hillsboro, Kansas
52. Klassen, Robert, Pacific College, Fresno, California
53. Klassen, Mrs. Robert, Pacific College, Fresno, California
54. Claassen, Willard, Conference Office, Newton, Kansas
55. Krahn, Cornelius, Bethel College, North Newton, Kansas
56. Kreider, Carl, Goshen College, Goshen, Indiana
57. Kroeker, M. A., General Welfare Office, Hillsboro, Kansas
58. Loewen, Emma, Tabor College, Hillsboro, Kansas
59. Loewen, Esko, Bethel College, North Newton, Kansas
60. Loewen, Jacob A., Tabor College, Hillsboro, Kansas
61. Loewen, Kenneth, Tabor College, Hillsboro, Kansas
62. Loewen, S. L., Tabor College, Hillsboro, Kansas
63. Lohrenz, G., Canadian Mennonite Bible College, Winnipeg, Man.
64. Mast, Russell, Bethel College Church, North Newton, Kansas
65. Mast, Mrs. Russell, Bethel College Church, N. Newton, Kansas
66. Meyer, Albert, Bethel College, North Newton, Kansas
67. Meyer, Mrs. Albert, Bethel College, North Newton, Kansas
68. Miller, Ernest E., Goshen College, Goshen, Indiana
69. Miller, Ira, E. M. C., Harrisonburg, Virginia
70. Miller, Paul, Goshen Biblical Seminary, Goshen, Indiana
71. Neufeld, Mrs. Vernon, Bethel College, North Newton, Kansas
72. Peachy, Paul, Washington, D. C.
73. Peters, G. W., Buhler, Kansas
74. Redekop, Calvin, Hesston College, Hesston, Kansas
75. Redekop, Mrs. Calvin, Hesston College, Hesston, Kansas
76. Regier, Arnold, Newton, Kansas
77. Regier, Fremont, Whitewater, Kansas
78. Rich, Ronald, Bethel College, North Newton, Kansas
79. Rich, Mrs. Ronald, Bethel College, North Newton, Kansas
80. Richert, H. C., Tabor College, Hillsboro, Kansas
81. Schellenberg, P. E., Bethel College, North Newton, Kansas
82. Schlichting, Ray, Hesston Manufacturing Co., Hesston, Kan.
83. Schlichting, Mrs. Ray, Hesston, Kansas
84. Schrag, Menno, Newton, Kansas
85. Shelly, Paul, Bluffton College, Bluffton, Ohio
86. Suderman, Elmer, Gustavus Adolphus College, St. Peters, Minn.
87. Suderman, Mrs. Elmer, St. Peters, Minnesota
88. Suderman, Paul, Hillsboro, Kansas

89. Thiessen, John, North Newton, Kansas
90. Wiebe, David, Tabor College, Hillsboro, Kansas
91. Wiebe, John A., Tabor College, Hillsboro, Kansas
92. Wiebe, John F., Tabor College, Hillsboro, Kansas
93. Wiebe, Ray, Tabor College, Hillsboro, Kansas
94. Wiebe, Vernon R., Tabor College, Hillsboro, Kansas
95. Wohlgemuth, Paul, Tabor College, Hillsboro, Kansas
96. Yoder, Naomi (Mrs.), Hesston College, Hesston, Kansas
97. Yoder, Sol, Hesston College, Hesston, Kansas
98. Zehr, Orlyn, Prairie View Hospital, Newton, Kansas

